

Executive Summary

ES1 PROJECT HISTORY

Solid waste management has been recognized as an important regional issue in San Diego County because of landfill capacity, urban encroachment, environmental concerns reducing potential facility expansions and replacement sites, more stringent environmental regulations, and increased cost of developing and operating waste management facilities.

Until 1997, the solid waste management system in San Diego County was serviced by eight landfill facilities. However, the San Marcos facility was closed by court order in March 1997, reducing the total facilities countywide to seven landfills. The closure of San Marcos limited the geographic distribution of landfills within the County. The majority of the waste generated in North County had been taken to the San Marcos facility. The generation of solid waste fluctuates and is dependent on population growth, construction and development activity, and recycling and waste reduction efforts and mandates. Historically, solid waste disposed of in San Diego County landfills grew steadily from less than 400,000 tons in 1978 to over 3.7 million tons in 1991. Based on data provided by the San Diego Department of Health in 2000, approximately 3,283,362 tons of Class III solid waste were generated within the County of San Diego in 1999. Of this, approximately 799,466 tons, or 24 percent, of solid waste were generated by jurisdictions in North County in 1999. By 1997, the majority of the cities in North San Diego County achieved the AB 939 goal of diverting 50 percent of the solid waste generated. However, between 1998 and 2000, the diversion rates for these same jurisdictions declined and as of 2000, the majority of the jurisdictions were no longer achieving the 50 percent diversion goal set forth by AB 939.

In 1999, waste generated in San Diego County was disposed of at landfills within the County, including Borrego, Miramar, Otay, Ramona and Sycamore, as well as landfills out of County, including Prima Desecha in Orange County and Copper Mountain in Arizona. Current waste management practices in San Diego County include the transfer of waste from local collection trucks to larger transfer vehicles at transfer stations. In 1999, 35 percent of the County's solid waste disposed of at landfills was disposed of via the use of transfer stations. North County jurisdictions rely more heavily on transfer stations with approximately 71 percent of the North County waste disposed of via use of transfer stations in 1999. Approximately 15 percent of the County's solid waste disposed of via direct haul or transfer stations was transported to out-of-County landfills. North County is more dependent on out-of-County landfills, with 27 percent of the solid waste generated within North County disposed of at out-of-County facilities.

Solid waste generation will grow with population growth. Population is projected to increase in the North San Diego County subregion by 1.7 percent per year from 578,034 in 1995 to 819,219 in 2020.¹ Assuming that the solid waste generation per person remains the same, waste disposal needs for North County jurisdictions will increase to one million tons annually by about 2014. In November 1994, after many years of attempting to site a new solid waste facility in the Northern

¹ The annual increase of 1.7 represents an average for both North County and South County jurisdictions and is based on 1999 SANDAG population projections for the years 1995, 2005, 2010, and 2020 for each of the jurisdictions.

San Diego County subregion, the voters of San Diego County approved Proposition C (Appendix B), the Gregory Canyon Landfill and Recycling Collection Center Ordinance. County-wide, Proposition C passed by a margin of 68 percent to 32 percent. It was approved by more than 60 percent of the voters in each of the nineteen incorporated cities in the County, including the City of San Diego. Proposition C provides for the construction and operation of a Class III landfill and recycling collection center on the subject site. The proposition amended the County's General Plan and Zoning Ordinance to allow the construction and operation of a landfill at the Gregory Canyon site. The Proposition provides development parameters, which are discussed in Section 4.1 (Land Use and Related Planning), that mandate the implementation of special land use allocations associated with site development (e.g. preservation of significant land as open space).

The validity of Proposition C was challenged by two landowners in the area near the Gregory Canyon property. In May 1995, the Superior Court ruling upheld the validity of the initiative. The Pala Band of Mission Indians, one of the two plaintiffs, appealed the decision of the Superior Court to the Court of Appeals. In 1997, the Court of Appeals unanimously upheld the validity of the initiative. The Supreme Court of California declined to hear an appeal from the decision of the Court of Appeals.

The County Integrated Waste Management Plan (CIWMP), which was approved and adopted in September 1996 by the County Board of Supervisors and a majority of the cities, is intended to coordinate waste reduction and disposal efforts among all jurisdictions in the County. Siting of landfills is addressed in the Siting Element, which states as its primary goal the provision of adequate future disposal capacity for wastes which need to be landfilled, to reduce the amount of waste disposed of in landfills, to identify disposal facilities or strategies, and to minimize the potential impacts of solid waste disposal facilities upon adjoining land uses. The approved CIWMP identifies Gregory Canyon, Merriam Mountain and Aspen Road as tentatively reserved disposal sites for the North County subregion.

Section 2K of Proposition C states: "The voters hereby reaffirm the policy of the County of San Diego that each sub-region of the County be responsible for providing sufficient solid waste facilities to handle the solid waste generated in each sub-region and solid waste shall not be shipped from one sub-region to any other sub-region except where an emergency exists."² While the North County subregion has several existing transfer stations (Fallbrook, Carlsbad, and Escondido), it no longer has a landfill. Therefore, waste generated in this region will continue to be transported significant distances to be disposed of in other landfills within San Diego County and in other out-of-County jurisdictions.

Without the development of the project, solid waste from northern San Diego County would continue to be trucked to and disposed of at existing landfills in San Diego County, including Ramona (East County), Otay (South Bay), Miramar (City of San Diego) and Sycamore (East County/City of San Diego), as well as Prima Deshecha (Orange County) and Copper Mountain (Arizona).

² While this language states a reaffirmation of a County policy, no existing, written policy has been found.

ES2 PROJECT OBJECTIVES

The applicant has developed the following set of project objectives:

- Provide a Class III solid waste disposal facility that is locally available, cost effective, and provides a long-term solution (i.e., 25 years) for disposal of waste generated in North County jurisdictions. Such a facility will also provide additional capacity to the County solid waste system as a whole.
- Utilize a site that can accommodate a Class III nonhazardous municipal solid waste disposal facility designed in compliance with all applicable environmental and permitting requirements for a Class III facility.
- Provide the infrastructure facility necessary to support the long term economic growth projected in the region.
- Minimize potential impacts of solid waste disposal facilities upon adjoining land uses.
- Preserve competition among solid waste disposal sites serving northern San Diego County to minimize future tipping fees through the provision of additional landfill capacity.

ES3 DESCRIPTION OF THE PROPOSED PROJECT

ES 3.1 PROJECT LOCATION

The proposed 1,770 acre Gregory Canyon Landfill site is located in northern San Diego County, on State Route 76 (SR 76), approximately three miles east of Interstate 15 (I-15) and two miles southwest of the community of Pala (Exhibit 3-1). The site is adjacent to the San Luis Rey River and lies along the western slope of Gregory Mountain. The site comprises portions of Section 4 and 5 of Township 10 South and Sections 32 and 33 of Township 9 South, Range 2 West of USGS 7.5' Pala Quadrangle (Exhibit 3-2).

The site is currently owned by Gregory Canyon Ltd., the project applicant.

ES 3.2 PROJECT DESCRIPTION

The Gregory Canyon Landfill Project includes the construction, operation, and closure of the landfill. The landfill will be a Class III landfill, with a 30-million ton capacity. Based on waste generation projections, the project is designed to provide for the disposal of up to one million tons of waste per year, with a life expectancy of about 30 years.³

Approximately 308 acres of the 1,770-acre site, or 17 percent, will be used for landfill activities. The project components include the landfill footprint (196 acres), ancillary facilities area (12 acres), two borrow/stockpile areas (87 acres), access road, bridge, and internal haul road (7 acres), and two desilting basins (6 acres).⁴

As indicated in Proposition C, the majority of the site (1,313 acres) will be dedicated as permanent open space for long-term preservation of sensitive habitat and species. (Exhibit 3-9 indicates potential areas that could be dedicated.) The land will be dedicated in perpetuity to the

³ Based on the design of the landfill and an intake of one million tons of waste per year, the landfill would have a 30 year life, which satisfies the project objective to provide for long term, i.e., 25 years, of capacity.

⁴ The ancillary facilities area was reduced in size to avoid impacts to wetland.

County of San Diego, the Pala Band of Mission Indians, another public agency, or a resource conservation group as selected by the project applicant.

Initial construction for the project includes the construction of the access road, bridge, and ancillary facilities, and excavation of a portion of the defined landfill footprint, including installation of the waste containment system (liner system) for Phase I. The proposed bottom liner system provides a five foot separation between the highest anticipated groundwater level and the refuse based on the following components: 1) a two-foot thick soil liner, 2) a one-foot thick leachate collection and removal system (LCRS), and 3) a two-foot thick protective layer. The leachate collection and removal system, leachate storage tank, and drainage system will also be constructed during the initial liner construction phase. The waste containment system will be constructed in stages as needed to provide continuous refuse disposal capacity through the landfill's projected service life.

The initial construction period will be approximately nine to twelve months in duration. The construction period for the bridge crossing the San Luis Rey River will be approximately six months. Construction equipment will be brought into the site over the existing river crossing and will remain on the site.

The proposed limits of excavation for the proposed Gregory Canyon Landfill are shown on the master excavation plan (Exhibit 3-5). Excavation of the footprint involves the removal of native material to generate a northerly sloping bottom area with interior side slopes on the west, south and east. The depth of excavation ranges from near zero to about 160 feet deep. The elevations of the bottom subgrade for the overall excavation range between approximately 370 feet amsl at the lowest elevation to 440 amsl along the southern portion of the footprint. The initial excavation of the footprint will be about 1.5 million cubic yards (mcy) with about 11.5 mcy of total excavation (of which 9.8 will be available for cover).

During the initial excavation of the Phase I area, a portion of the excavated material will be used for engineered fill necessary to construct the ancillary facilities area and a toe buttress, with the remainder of the material being stockpiled in the landfill footprint or one of the two designated areas on site (Exhibit 3-3) or shipped off-site. In subsequent phases excavated material will be stockpiled within the footprint or in one of the two designated areas or shipped off-site. The applicant will obtain a Major Use Permit (MUP) prior to the exportation and sale of any material, if necessary.

Excavation and processing of materials related to landfill construction and operation will utilize a rock processing facility, including a crusher and screens. This equipment will be used to facilitate movement of the excavated rock. Crushed rock will be stored for future use or ground for use as daily or intermediate cover.⁵ Rock crushing will occur within the southwestern portion of the landfill footprint or conducted behind a berm which reduces noise levels (see Section 4.6, Noise and Vibration).

⁵ Excess rock could be exported off-site, if a Major Use Permit were obtained. However, the project has been designed to accommodate the storage of all excavated material on-site. The analyses contained in this EIR represent the worst case scenario. For example, while the stockpile areas have been sized to accommodate all excavated material on-site, in the case of traffic, the exportation of material would represent a worst case scenario as this would result in an increase in trips. However, in the case of aesthetics, the storage of material on-site would represent a worst-case scenario as this would use the borrow/stockpile areas to the full extent as described in Chapter 3, Project Description.

Approximately 87 acres of borrow/stockpile area will be provided in two locations to the west of the proposed landfill footprint. The borrow/stockpile areas will be used to store or excavate material that is used in the daily operation of the landfill. The maximum elevation of the larger borrow/stockpile area ranges from about 940 to 1,020 feet. The maximum elevation of the smaller borrow/stockpile area is about 500 feet.

The project includes modifications to SR 76 at the access road entrance to improve sight distance and to facilitate truck movements (Exhibit 3-6). The improvements include an increase in pavement width west of the access road to 48 feet to provide for an eastbound deceleration lane, and pavement improvements east of the access road to a width of 36 feet to accommodate a westbound left turn lane.

The proposed access road from SR 76 to the ancillary facilities area is a two to three lane paved road, 32 to 44 feet wide. The road will extend through the abandoned Lucio dairy and south to the San Luis Rey River. A bridge, approximately 638 feet in length, will be constructed across the San Luis Rey River.

Construction of the access road and bridge includes excavation in the river channel to maintain the 100-year flood elevation at or below the existing 100-year flood elevation. The excavation will create a more consistent bottom elevation of the river. Rip rap will be placed on the banks to minimize erosion.

Access to the landfill is controlled at the ancillary facilities area (Exhibit 3-8). Upon entering, vehicles will pass through the fee booth and scales. An administrative office and maintenance building will be located in the facilities area. A recyclable drop off area is proposed on the east side of the maintenance building. Although hazardous materials will not be collected at the site, a hazardous materials storage area will be maintained for use if such materials are found in the refuse during operations.

Two 10,000-gallon leachate holding tanks will be located in the southwestern corner of the ancillary facilities area. A 20,000 gallon water tank will be located just north of the paved area. The water tank will be supplied from on-site groundwater wells.

The project requires infrastructure, including electricity, sewage disposal, and water (see Section 4.15, Public Services and Utilities). Electricity will be used in the ancillary facilities area for the scales and buildings. Security lighting will be provided around the buildings in the ancillary facilities area. Lighting will be low impact, focused, and shielded to minimize spill light into the night sky or adjacent properties. Utility connections will be undergrounded in the access road from SR 76 to the facilities area. Groundwater from on-site wells will be used for construction and operation of the project, including dust suppression. Bottled drinking water will be provided in the facilities area. A portable chemical toilet will be located at the northern end of the ancillary facilities area.⁶ The applicant will contract with a sewage disposal service to remove effluent from the chemical toilets for off-site treatment and disposal.

A facility identification sign will be located at the entrance gate at SR 76. The sign will provide information on the facility operator, hours of operation, and recognized holidays. Signs will be located on the scalehouse indicating the schedule of charges and the general types of waste materials which will not be accepted at the site. Additionally, posted signs will direct customers

⁶ If permanent restroom facilities with an on-site septic system were to be installed in the future, approval of a percolation test by DEH will be required. However, this is not proposed as a component of the project.

to the refuse unloading and recycling collection areas. Other posted signs will display site safety and traffic rules.

Other Components

As indicated in Proposition C the project includes the relocation of a portion of the existing SDG&E transmission lines and easement because two towers are located within the proposed landfill footprint. Relocation of these facilities is proposed to the east of their existing location (Exhibit 3-10). A 300-foot-wide easement for the existing and future SDG&E lines will be maintained. The project applicant has coordinated the proposed relocation of the towers and easement with SDG&E. An alternative western relocation is analyzed in Chapter 6, Alternatives.

Section 3G of Proposition C also requires the protection of the existing pipelines of the First San Diego Aqueduct. The project has been designed to protect the First San Diego Aqueduct primarily through the use of engineered protection where roads cross the pipelines and methods of excavation blasting. Therefore, relocation of the First Aqueduct is not a component of the project. However, a condition of the SWFP and a mitigation measure will require that prior to any construction work related to the landfill, the applicant shall provide DEH with a copy of the executed agreement with SDCWA providing for the relocation and protection of the San Diego Aqueduct pipelines.

Since SDCWA has expressed interest in the relocation of the pipelines, a project option is the relocation of a portion of the SDCWA First Aqueduct to the west of the current location (Exhibit 3-11). The project proponent has indicated a willingness to relocate the pipelines and is presently negotiating an agreement with SDCWA for the relocation. The potential relocation is analyzed in each section of Chapter 4 of this EIR.

In 1996, an agreement was executed by the proponents of the Gregory Canyon Landfill, San Luis Rey Municipal Water District (SLRMWD), and several private landowners located downstream of the landfill project. A complete copy of the San Luis Rey Municipal Water Agreement is provided in Appendix C. The purpose of the agreement is to ensure that the construction, operation, and closure of the Gregory Canyon Landfill project are carried out in a manner that will help protect the Pala Basin of the San Luis Rey River and the quality of the water in the Pala Basin. Provisions outlined in the landfill agreement include stipulations, which address the protection of water supply, water rights, groundwater monitoring, liability, and closure.

ES4 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

In May 1995, DEH distributed the NOP for the preparation of the Draft EIR (Appendix A). Issues were raised in the scoping process. In addition, issues were raised in the comment letters received during the comment period for the January 1999 Draft EIR.

The areas of controversy and issues to be resolved are described below:

- Concern about the potential of an on-site fault. This issue is addressed in Section 4.2, Geology and Soils.
- Geologic stability of the site.
- Dust and air quality impacts.
- Noise impacts to adjacent residences and to wildlife as well as traffic noise to residences along SR 76 from project-generated traffic.

- Capacity of SR 76 between I-15 and the project access road and traffic safety issues.
- Project-related impacts may potentially affect the groundwater resources. Project components addressing the issue are described in Chapter 3.0, Project Description. The potential impacts to the groundwater resources are discussed in Section 4.3, Hydrogeology.
- Concern over surface runoff and scour impacts from the bridge construction and channel excavation and potential impacts to the existing Pipelines 1 and 2. This issue is discussed in Section 4.4, Surface Hydrology.
- Site development may result in the potential degradation of cultural resources. This is addressed in Section 4.12, Ethnohistory and Native American Interests.
- Potential effects on biological resources on the site, including endangered species and a regional and local wildlife corridor. This issue is addressed in Section 4.9, Biological Resources.
- Development of the site as proposed may be unsuitable for a rural setting. Consistency of the project with the San Diego County General Plan policies is summarized in Section 4.1, Land Use and Related Planning and is discussed in detail in Appendix E, General Plan Consistency.
- Concern with the road and equipment crossing of the San Diego Pipelines 1 and 2 (First San Diego Aqueduct). This issue is addressed in Chapter 3, Project Description.
- Concern with the analysis on potential cumulative impacts from Pipeline No. 6. This issue is discussed in Chapter 5.0 Cumulative Impacts.

ES5 SUMMARY OF ALTERNATIVES

CEQA requires that an EIR describe a range of reasonable alternatives to the project, or to the location of the project, which could feasibly attain the basic objectives of the project, and to evaluate the comparative merits of the alternatives. Chapter 6 sets forth potential alternatives to the proposed project and evaluates them as required by CEQA. Several alternative development scenarios have been identified as a means of reducing potentially significant impacts associated with implementation of the proposed project. These alternatives include several potentially feasible development scenarios, including:

- No Project/No Development Alternative
- Western SDG&E Alignment
- Alternatives to Reduce Unmitigable Impacts:
 - Reduced Visual Impacts
 - Reduced Air Emissions
- Alternative North County Locations:
 - Merriam Mountain
 - Aspen Road
- Long-Term Transport of Wastes to Sites Outside San Diego County
- Waste Reduction and Recycling
- Prescriptive Design with a Single Liner Alternative
- Prescriptive Design with a Double Liner Alternative

As required under CEQA the No Project Alternative is addressed. The project results in significant unavoidable impacts in air quality, aesthetics, and cultural resources. The use of the

same general project design but on a reduced scale was assessed, with the intent being to fully mitigate the significant and unmitigable environmental effects. Two reduced capacity alternatives are discussed, a reduced air quality emissions, and reduced visual impacts. To fully mitigate the impact to cultural resources would mean no development of the landfill at this location.

Alternate locations in San Diego County were examined to determine how the relative environmental impacts compared between various possible sites. Merriam Mountain and Aspen Road sites, both identified in the San Diego CIWMP as tentative landfill sites, are assessed.

Finally, alternatives that would eliminate the need for a new landfill are examined. Use of existing landfills for waste disposal are evaluated in the No Project Alternative, since existing facilities both in and out of San Diego County are currently being used and in the Out-of-County Alternative. Methodologies to reduce waste volume are examined and methods to transform the waste to other products (compost and electricity) are assessed. A Prescriptive Design with a Single Liner Alternative has been added to the Final EIR as a result of comments received on the RDEIR. In addition, a Prescriptive Design with a Double Liner Alternative has been added in response to comments received from the Regional Water Quality Control Board. These alternatives do not create any new significant impacts not previously evaluated in the Revised Draft EIR.

ES6 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Proposition C adopted by the voters contains certain mitigation measures which have been adopted verbatim as part of this Final EIR. Proposition C measures contain a “C” in the number to differentiate these measures from the more detailed measures. However, Proposition C mitigation measures have not been relied upon in assessing the environmental impacts of the project. More detailed mitigation measures have been developed as part of this EIR to mitigate project impacts identified by the detailed environmental studies completed for the project. These more detailed mitigation measures, and not the Proposition C mitigation measures, have been utilized in assessing the project’s environmental impacts after mitigation.

Table ES1 summarizes the Proposition C mitigation measures and the significant impacts of the proposed project along with the proposed mitigation measures by environmental resource area. The residual impact after implementation of the mitigation measures is also indicated for each significant impact.

Table ES2 summarizes the significant impacts and mitigation measures associated with the project option of the relocation of a portion of the First San Diego Aqueduct pipelines.

TABLE ES-1
SUMMARY TABLE OF PROJECT IMPACTS, MITIGATION MEASURES, AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	4.1 LAND USE AND RELATED PLANNING	
This is a Proposition C mitigation measure	MM4.1.C5A: The solid waste facilities shall remain open for the receipt of refuse a minimum of eight (8) hours a day, six (6) days a week, excepting those holidays observed by county owned landfills. ⁷	This is a Proposition C mitigation measure
This is a Proposition C mitigation measure	MM 4.1.C5B: Solid waste operation shall occur only between the hours of 7:00 a.m. and 6:00 p.m., Monday through Friday, and 8:00 a.m. and 5:00 p.m. on Saturday unless different hours are established by the Integrated Waste Management Board. ⁸ For the purposes of this mitigation measure “solid waste operations” shall include the receipt, handling, processing, and/or disposal of solid waste or recyclable materials; cover operations; site grading and/or excavation, including blasting and rock crushing; and heavy equipment operation. Other site activities such as the operation of gas and leachate collection and treatment systems, remedial activities required by a regulatory agency, maintenance within the maintenance yard, and activities conducted in a completely enclosed building shall not be limited to these hours of operation.	This is a Proposition C mitigation measure
This is a Proposition C mitigation measure	MM 4.1.C5Q: A Citizen Environmental Review Board (the “Board”) shall be established by agreement between the Applicant and the cities or other governmental entities agreeing to supply waste to the Project. The members of such Board shall be appointed by each such city or entity and shall be individual citizens who are not employees or officials of such city or entity. The Board shall have the authority to inspect and review all reports submitted by the Project to any other regulatory agency and to make recommendations to any such regulatory agency with	This is a Proposition C mitigation measure

⁷ Effective October 31, 1998, there are no County-owned landfills. Since this measure was contained in Proposition C, it is provided verbatim.

⁸ Although stated this way in Proposition C, the Local Enforcement Agency, which is County DEH, will be the agency regulating and enforcing hours of operation.

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	respect to the operation of the Project, including any enforcement actions the Board may deem appropriate. The Board shall establish an environmental review team consisting of qualified personnel to monitor the operations of the landfill which team shall have reasonable access to the landfill during all hours of operation of the landfill.	
Impact 4.1-1: <i>The Citizen Environmental Review Board has not yet been established in accordance with Section 5Q of Proposition C.</i>	MM 4.1-1: The applicant or operator of the landfill shall establish a Citizen Environmental Review Board as required in Proposition C (Section 5Q). The applicant shall provide written verification to the County Department of Environmental Health after at least five public agencies have executed waste supply agreements with the operator.	Less than significant
Impact 4.1-2: <i>Section 3B of Proposition C requires that a dedication mechanism be established for 1,313 acres of open space. No dedication mechanism has been identified for the project at this time.</i>	MM 4.1-2: In compliance with Section 3B of Proposition C, prior to commencement of operation of the landfill, the applicant shall either dedicate 1,313 acres of the site as permanent open space or create a permanent open space easement consisting of not less than 1,313 acres for long-term preservation of sensitive habitat and species, including coastal sage scrub, coast live oak woodlands, and cottonwood-willow riparian forests. The applicant shall convey or dedicate this land or easement in perpetuity to the satisfaction of the County of San Diego. The applicant shall provide a copy of the recorded fee conveyance or open space easement to the County Department of Environmental Health prior to commencement of operation.	Less than significant
Impact 4.1-3: <i>Section 3G of Proposition C requires the protection of the San Diego Aqueduct pipelines and although no impacts to the pipelines have been identified, the following measure is included to ensure adequate protection of the pipelines.</i>	MM 4.1-3: Before commencing any construction work related to the landfill, the applicant shall provide the Local Enforcement Agency with a copy of the executed agreement between Gregory Canyon, Ltd. and the San Diego County Water Authority providing for relocation and protection of the San Diego Aqueduct pipelines.	Less than significant
	4.2 GEOLOGY AND SOILS	
This is a Proposition C mitigation measure	MM 4.2.C5H: All structures located at the Gregory Canyon site shall be designed by a qualified engineer to withstand the maximum probable earthquake, to avoid potential impacts associated with earthquakes and ground shaking.	This is a Proposition C mitigation measure

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Impact 4.2-1: During construction, the liner system of the landfill could be susceptible to sliding failures.	MM 4.2-1: Before the liner is buttressed with refuse, the geosynthetic materials (i.e., plastic geomembranes and geotextile fabrics) shall be anchored at the head of the slope, and weighted throughout their extent with 20-pound sand bags on five-foot vertical spacing. If the liner system were to be damaged before it is weighted down by refuse, the applicant shall repair, and if necessary reconstruct, the liner. Repairs to the geosynthetic materials will be completed and tested in accordance with regulations and project specifications. The RWQCB will perform field observations to ensure compliance.	Less than significant
Impact 4.2-2: Although uncommon, significant seismic events could impact the landfill's environmental control systems and the landfill liner could tear.	MM 4.2-2: Following significant seismic events, inspection of all facilities and structures, as well as surrounding natural features, will be performed and necessary repairs will be made. If a tear in the liner is identified, repairs to the geosynthetic materials shall be completed immediately by placing a patch over the torn sections and fusing the materials by patch-welding. The operator shall perform vacuum testing on the patch welds to ensure compliance with the standards established for the original liner construction. Patching will be performed under strict construction quality assurance protocols used during original construction, and the RWQCB may be present to perform field observations at any time during the repair to ensure compliance with applicable regulations.	Less than significant
Impact 4.2-3: Settlement of the landfill will occur due to compression and decomposition of the refuse fill and movement of soils into the voids within the refuse. Landfill settlement can affect final grades and runoff control structures, landfill gas control systems, and the integrity of the final cover.	MM 4.2-3: A monitoring and maintenance program that includes annual topographic surveys to measure settlement, quarterly visual inspections to identify damage to the final cover or gas systems, and repair of these systems as required shall be implemented. The frequency of monitoring may be reduced after closure of the landfill. The gas collection system shall be flexible to accommodate settlement and allow for repair. The County of San Diego Department of Environmental Health will perform inspections to ensure compliance.	Less than significant

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Impact 4.2-4: Rockfalls could result in damage to landfill facilities or personnel.	MM 4.2-4: Additional inspection of the rock masses surrounding the landfill will be completed every 5 years and/or after a significant earthquake event in order to identify new areas of potential rockfall concerns. The applicant's geotechnical consultant shall submit a letter to the County of San Diego Department of Environmental Health after any such inspection summarizing findings and necessary actions.	Less than significant
	4.3 HYDROGEOLOGY	
This is a Proposition C mitigation measure	MM 4.3.C5E: A liner and leachate collection system shall be installed and monitored as required by the Regional Water Quality Control Board.	This is a Proposition C mitigation measure
This is a Proposition C mitigation measure	MM 4.3.C5G: The project shall comply with all requirements of the Regional Water Quality Control Board to ensure protection of surface and underground water quality.	This is a Proposition C mitigation measure
Impact 4.3-1: Although a liner, LCRS, and water quality monitoring program are incorporated into the project design, the potential release of leachate from the landfill could result in impacts to groundwater quality.	MM 4.3-1a: For the purpose of providing additional environmental assurance to the San Luis Rey Municipal Water District, in addition to the 13 monitoring wells surrounding the landfill, the water quality monitoring shall include at a minimum monitoring of two production wells (downgradient SLRMWD well #34 and upgradient Lucio well #2), upgradient alluvial monitoring well GMW-3, and downgradient alluvial monitoring well GLA-16 located within the project boundary).	Less than significant
	MM 4.3-1b: If contamination is detected in any monitored well, the landfill operator shall be responsible for treatment and disposal of contaminated water. The landfill operator shall ensure that impacted water is treated to acceptable water quality standards, consistent with existing background water quality as provided in CCR Title 27, Section 20400(a)(1). Adequate treatment shall be implemented to maintain background levels established by the RWQCB at the time of issuance of the waste discharge requirements.	Less than significant
	MM 4.3-1c: The Applicant shall provide to the San Luis Rey Municipal Water District simultaneously with the submission to the RWQCB data collected from the groundwater monitoring program and shall provide to the District and its consultants split samples from any groundwater monitoring station upon reasonable	Less than significant

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	notice given before the next regularly scheduled sampling to enable the District to verify the data collected.	
	MM 4.3-1d: Prior to the commencement of Phase I construction project grading, the Applicant shall provide the San Luis Rey Municipal Water District and the other parties to the Mitigation agreement with an irrevocable letter of credit in accordance with Section 9 and Exhibit C of the Mitigation Agreement. The Letter of Credit shall be automatically renewed annually.	Less than significant
	MM 4.3-1e: Prior to commencement of project operation, the Applicant shall establish, maintain, and administer a trust fund or third party custodial account for the benefit of the San Luis Rey Municipal Water District and the other parties to the Mitigation Agreement in accordance with Section 9 and Exhibit C of the Mitigation Agreement.	Less than significant
	MM 4.3-1f: As a condition of any water rights appropriation permit that may be granted by the State Water Resources Control Board, the Applicant shall reduce its diversion of water if the amount of groundwater available within the San Luis Rey Municipal Water District based upon water rights as they existed on April 15, 1996 within the boundaries defined in the Mitigation Agreement, is insufficient to meet the reasonable and beneficial needs of the District or any of the landowners within the District.	Less than significant
	MM 4.3-1g: The Applicant shall identify and use an alternate water supply for construction and operation of the project if the amount of groundwater available within the San Luis Rey Municipal Water District is insufficient to meet the reasonable and beneficial needs of the District or any of the landowners within the District.	Less than significant
	MM 4.3-1h: If the construction, operation, or closure of the landfill causes degradation of the Pala Basin water or quality of foreign water stored in the Pala Basin for use within the Pala Basin so that it cannot be used for domestic uses and for irrigation, the Applicant shall be liable to the San Luis Rey Municipal Water District to the extent of any degradation of the	Less than significant

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	quality of Pala Basin water or the quality of foreign water stored in the Pala Basin caused by the construction, operation or closure of the landfill, including the cost of remediating the degradation of water quality attributable to the construction, operation or closure of the landfill, or if such remediation is not technologically or economically feasible, of providing an alternative water supply pending permanent remediation measures to the extent necessary to meet the reasonable needs for domestic and irrigation uses of the parties who signed the Mitigation Agreement. The applicant's liability with respect to foreign water shall be limited to remediation of a maximum of 17,694 acre-feet. Remediating the water quality of the Pala Basin or providing an alternative water supply, shall be part of the closure plan and part of the cost estimate required by 14 CCR § 17782.	
	MM 4.3-1i: The Applicant shall notify the San Luis Rey Municipal Water District and each of the parties to the Mitigation Agreement of any request to modify or to be released from the requirements of the closure plan or the post closure maintenance plan for the project.	Less than significant
	MM 4.3-1j: The Applicant shall consult with the San Luis Rey Municipal Water District concerning the number, specifications, location, and frequency of data collection at the monitoring stations. The final decision regarding the need for and adequacy of the number, specifications, location of and frequency of data collection from the monitoring stations will be made by the RWQCB.	Less than significant
	4.4 SURFACE HYDROLOGY	
This is a Proposition C mitigation measure	MM 4.4C5G: The project shall comply with all requirements of the Regional Water Quality Control Board to ensure protection of surface and underground water quality.	This is a Proposition C mitigation measure
	4.5 TRAFFIC AND CIRCULATION	
This is a Proposition C mitigation measure	MM 4.5.C5I: In order to mitigate traffic impacts, the Applicant shall widen and realign State Route 76 on either side of the access road to improve sight distance and to facilitate truck movements. The realigned segment will provide approximately 1.000 feet of	This is a Proposition C mitigation measure

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	sight distance in both directions for traffic leaving the landfill. The Applicant shall contribute on a fair share basis to the widening of State Route 76 west of the access road to applicable state standards. The fair share shall be based upon the state standard average daily trips. Striping will be provided for acceleration/ deceleration lanes and an over-take lane for through traffic. These realignment plans may be modified as necessary to meet Caltrans requirements.	
Impact 4.5-1: Project traffic could worsen sections of poor surface along SR 76 from Interstate 15 to project access.	MM 4.5-1: The project applicant shall conduct a structural analysis of SR 76 and determine the structural requirements along SR 76 from the Rosemary's Mountain Palomar Aggregates project to the proposed landfill entrance to determine whether the existing foundation can accommodate anticipated heavy truck loads. The applicant shall obtain certification from Caltrans for adequate pavement surface to be enforced by the County Department of Public Works. This analysis shall not be extended west of the I-15 ramps if the Palomar Aggregates project does not go forward. Construction of the recommended pavement improvements, consistent with Caltrans requirements shall be implemented prior to operation of the landfill, if determined necessary, and fair share contribution made by the applicant.	Less than significant
Impact 4.5-2: For the existing plus other development plus project scenario, the I-15/SR 76 northbound ramp will be adversely impacted by the proposed project and exceed the acceptable LOS D criteria.	MM 4.5-2: At the commencement of operation, the project applicant shall make a fair- share contribution for the addition of an eastbound left turn lane and westbound through lane on the I-15 overcrossing.	Less than significant
Impact 4.5-3: For the year 2020 scenario without the General Plan improvements (widening to four lanes) SR 76 will exceed the acceptable LOS D criteria	MM 4.5-3: The Project applicant shall make an irrevocable offer of dedication for right-of-way to 108 feet in width within the Project boundary for the widening of SR 76 to four lanes per the County of San Diego Circulation Element, including a designated bike route. In addition, the project applicant shall provide a fair share contribution for the cost to provide four lanes on SR 76 from the western boundary of the project site to the project access road.	Significant due to uncertainty of timing of widening of SR 76
	4.6 NOISE AND VIBRATION	
This is a Proposition C mitigation measure	MM 4.6.C5K: The applicant shall prepare a Noise Abatement	This is a Proposition C

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	<p>Plan to include:</p> <ul style="list-style-type: none"> Physical design provisions to ensure that ambient noise levels do not exceed 65 CNEL at the boundaries of the Gregory Canyon site. Installation of landfill equipment and vehicles with noise suppressing equipment to assist in meeting the above restrictions. Provisions for at least 24-hour in advance written notice of any blasting on-site to residents within a one-mile radius of the blast site. Where ambient noise levels exceed 65 CNEL at the boundaries of the Gregory Canyon site, the applicant shall retain a qualified noise expert to evaluate the problem and recommend mitigation measures. These mitigation measures will be implemented by the applicant. 	mitigation measure
Impact 4.6-1: During construction activities within the landfill footprint, noise levels could exceed the 62.5 dBA L_{eq} noise standard established by the County Noise Ordinance at the property line adjacent to residential uses.	<p>MM 4.6-1a: The applicant shall monitor noise levels at the property line adjacent to residential uses in the first year of the initial construction and whenever the construction operation changes. If noise levels exceed 62.5 dBA L_{eq} at the property line, the applicant shall implement some or all of the following measures to reduce the noise levels to below 62.5 dBA L_{eq}:</p> <ul style="list-style-type: none"> Build temporary noise barriers or berms between construction activities and residences. Such barriers or berms shall be disassembled when construction is complete. Sound barriers made of plywood would likely be sufficient, given the topography of the site and adjacent area. Other design parameters (e.g., height, length, and location) for these temporary noise barriers or berms shall be determined by a qualified noise expert. 	Less than significant
	<ul style="list-style-type: none"> Reduce the amount or size of construction equipment. For example, equipment with smaller engines could be used. This would be feasible for most types of equipment. However, the geology of the site may dictate the minimum size of certain types of rock 	

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	moving or other equipment. If the 62.5 dBA L_{eq} threshold is not exceeded, no action beyond monitoring shall be necessary.	
	MM 4.6-1b: All construction activities shall be limited to between the hours of 7:00 A.M. and 6:00 P.M., Monday through Friday and 8:00 A.M. to 5:00 P.M. on Saturday as required under Proposition C. Construction shall not occur on Sundays or federal holidays.	Less than significant
	MM 4.6-1c: The applicant shall ensure that construction equipment and trucks are properly tuned and have noise muffling equipment that meets or exceeds applicable EPA standards.	Less than significant
Impact 4.6-2: Noise levels from rock crushing and tire shredding could exceed 62.5 dBA L_{eq} at the adjacent residences if the operations occur simultaneously.	MM 4.6-2a: The operator shall ensure that the tire shredding and rock crushing shall not occur at the same time.	Less than significant
	MM 4.6-2b: Tire shredding operations shall be monitored the first time such activity is conducted on-site to ensure that noise levels do not exceed the residential and wildlife thresholds. If the noise levels exceed either threshold, the applicant shall implement noise abatement measures which may include such measures as equipment silencers, enclosures, noise baffling, and/or berms. If the thresholds are not exceeded, no additional action beyond monitoring shall be required.	
Impact 4.6-3: Although the flare station is not anticipated to create any significant noise impacts, the flare station could generate noise that would exceed the County Noise Ordinance standard of 62.5 dBA L_{eq} and 60 dBA L_{eq} for sensitive receptors and wildlife habitat, respectively.	MM 4.6-3: Noise verification shall be conducted specifically for the flare station prior to commencement of its operation to ensure compliance with the 62.5 dBA L_{eq} and 60 dBA L_{eq} thresholds at the property line and for wildlife habitat, respectively.	Less than significant
Impact 4.6-4: The project would contribute to cumulative traffic noise levels at residences along SR 76 that exceed the County noise standard of 60 CNEL.	MM 4.6-4a: Unless determined infeasible by CalTrans, the project applicant shall provide a fair share contribution for the cost to install a sound wall in the right-of-way along SR 76 to reduce noise levels from cumulative traffic at the existing residences. ⁹	Less than significant unless mitigation is infeasible

⁹ A sound wall would also reduce the project-related increase in traffic noise levels.

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	4.7 AIR QUALITY	
This is a Proposition C mitigation measure	MM 4.7.C5F: The Project shall include a network of vertical extraction wells, lateral transmission pipes to a gas recovery facility, and perimeter gas monitoring probes. With this system, the landfill gas would be extracted from the landfill and combusted in an enclosed flare.	This is a Proposition C mitigation measure
This is a Proposition C mitigation measure	MM 4.7.C5J: Air quality impacts associated with the Project shall be mitigated by meeting all requirements imposed by the San Diego Air Pollution Control District for the Authority to Construct and Authority to Operate permits. Section 5L of Proposition C contains a mitigation measure pertaining to potential odor impacts.	This is a Proposition C mitigation measure
This is a Proposition C mitigation measure	MM 4.7.C5L: To control odors on-site, the Applicant shall submit an Odor Control Plan to the San Diego County Air Pollution Control District for review and approval. Section 5M of Proposition C contains a mitigation measure pertaining to potential dust impacts.	This is a Proposition C mitigation measure
This is a Proposition C mitigation measure	MM 4.7.C5M: To control dust from Project operations, the Applicant shall submit a Dust Control Plan to the San Diego County Air Pollution Control District for review and approval.	This is a Proposition C mitigation measure
Impact 4.7-1: Project construction would result in emissions of PM_{10} and NO_x that exceed the APCD significance thresholds.	MM 4.7-1: The construction contractor shall implement the following dust control measures: <ul style="list-style-type: none"> • The construction contractor shall use water trucks to keep all areas of vehicle movement sufficiently damp to prevent the raising of dust by travel in these areas. • All unpaved haul roads shall be watered every two hours, unless the road surface appears visibly damp. • The construction contractor shall wet down the site in the late morning and after work is completed for the day. • At least once per day, the construction contractor shall wet down non-active construction areas that have not been reseeded to minimize windblown dust. • As soon as feasible, the construction contractor shall re- 	Significant

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	<p>establish groundcover on areas disturbed by construction—through seeding and watering those areas that will not be disturbed for extended periods (e.g., two months or more).</p> <ul style="list-style-type: none"> The construction contractor shall reduce traffic speeds on all unpaved road surfaces to no more than ten miles per hour. <p>In addition, to reduce vehicle exhaust emissions:</p> <ul style="list-style-type: none"> The construction contractor shall maintain construction equipment engines by keeping them tuned in accordance with manufacturers specifications. The construction contractor will only utilize California diesel fuel in heavy duty vehicles. The construction contractor will only employ construction equipment that meets California Exhaust Emission Standards for Post-1996 Off-Road Compression-Ignition Engines. 	
<p>Impact 4.7-2: Operation of the proposed landfill would result in emissions of PM_{10} and NO_x that exceed the APCD significance thresholds.</p>	<p>MM 4.7-2: The landfill operator shall implement the following dust control measures:</p> <ul style="list-style-type: none"> The landfill operator shall use water trucks to keep all areas of vehicle movement sufficiently damp to prevent the raising of dust by travel in these areas. The landfill operator shall wet down the site in the late morning and after work is completed for the day. At least once per day, the landfill operator shall wet down non-active construction areas that have not been reseeded to minimize windblown dust. The landfill operator shall reduce traffic speeds on all onsite, unpaved road surfaces to no more than ten miles per hour. <p>In addition, to reduce vehicle exhaust emissions:</p> <ul style="list-style-type: none"> The landfill operator shall maintain trucks and construction 	Significant

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	<p>equipment engines by keeping them tuned in accordance with manufacturers specifications.</p> <ul style="list-style-type: none"> The landfill operator will only utilize California diesel fuel in heavy-duty vehicles. The landfill operator shall only employ construction equipment that meets California Exhaust Emission Standards for Post-1996 Off-Road Compression-Ignition Engines. 	
	4.8 AGRICULTURAL RESOURCES	
<i>No impacts identified</i>	No mitigation measures required	Not applicable
	4.9 BIOLOGICAL RESOURCES	
This is a Proposition C mitigation measure	MM 4.9.C5N: All sensitive species and habitat impacted by the project shall be mitigated in accordance with requirements imposed by the USFWS as part of the Section 7 consultation.	This is a Proposition C mitigation measure
This is a Proposition C mitigation measure	MM 4.16.C5C: At least five (5) days each week, the Applicant shall inspect for, and clean up, all litter and illegal dumping which occurs on, or adjacent to, the landfill access road and that portion of Highway 76 between the intersection with Interstate 15 and the site. The clean up team shall consist of at least one truck with a minimum crew of two persons.	This is a Proposition C mitigation measure
<i>General measure</i>	MM 4.9a: A pre-construction meeting shall take place with a qualified biologist and construction personnel. The biologist shall explain the access restrictions on site, the importance of remaining within construction zones, the sensitivity of the habitats and species on site, and shall explain the potential consequences of violating the access restrictions and impacting biological resources outside the construction zones. Any accidental impacts to sensitive habitat that occur outside the designated impact area shall be mitigated at a 3:1 ratio. A letter from the applicant's biologist and contractor(s) verifying receipt of biological information shall be provided to the County Department of Environmental Health prior to commencement of construction.	Less than significant
Impact 4.9-1: The following sensitive resources would be significantly impacted by the landfill project: 178.8 acres of	MM 4.9-1a: Impacts to coastal sage scrub and coastal sage scrub/chaparral shall be mitigated at a minimum ratio of 2:1	Less than significant

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<i>coastal sage scrub, 44.1 acres of coastal sage scrub/chaparral, 27.0 acres of coast live oak woodland (some of which includes Engelmann oaks and is state jurisdictional habitat), 0.2 acre of native perennial grassland, 2.4 acres of southern willow scrub, 0.2 acre of mule fat scrub, and 0.2 acre of open channel.</i>	through on-site preservation of coastal sage scrub and coastal sage scrub/chaparral in dedicated open space. A total of 445.8 acres shall be required for mitigation, including 88.2 acres of coastal sage scrub/chaparral and 357.6 acres of coastal sage scrub. To satisfy the coastal sage scrub/chaparral requirement, coastal sage scrub shall be utilized. The mitigation areas shall be preserved in perpetuity as on site open space.	
	<p>MM 4.9-1b: Impacts to southern willow scrub and mule fat scrub shall be mitigated by the creation of in-kind habitats on the landfill site in dedicated open space. A mitigation ratio of 4:1 shall be used. A total of 10.4 acres shall be required for mitigation including 9.6 acres of southern willow scrub and 0.8 acre of mule fat scrub. The habitat creation can occur in the locations for riparian habitat creation shown on Figure 4.9-5.</p> <p>Habitat creation of southern willow scrub and mule fat scrub shall occur at the ratio specified herein, such that “no net loss” of habitat is achieved, in areas that would not be affected by noise levels equal to or greater than 60 dB(A) L_{eq} and that are part of the dedicated open space on site. Conditions to be met shall include the preparation of a detailed mitigation plan, final landscape construction documents, ACOE/CDFG permit approval, and installation, maintenance, and long term monitoring of the mitigation areas. The mitigation plan shall be developed and submitted to the ACOE and CDFG for approval as part of the project permitting process. The implementation of the mitigation shall be prior to or concurrent with construction or as otherwise determined in consultation with the resource agencies.</p>	<p>Less than significant</p> <p>Less than significant</p>
	MM 4.9-1c: Impacts to 0.8 acre of open channel shall be mitigated through implementation of the habitat enhancement plan described in MM 4.9-18 to restore habitat in the San Luis Rey River watershed on site.	Less than significant
	MM 4.9-1d: Impacts to 27.0 acres of coast live oak woodland (some of which includes Engelmann oaks and is state jurisdictional habitat) shall be mitigated at a 3:1 ratio through on-site preservation of 30.0 acres of in-kind habitat in dedicated open	Less than significant

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	space off-site acquisition of a minimum of 51.0 acres of in-kind existing coast live oak woodland or a combination of preservation/acquisition and 5.9 acres of habitat creation to ensure a “no net loss” of state jurisdictional habitat. Within the 51-acre off-site mitigation parcel, the species-specific mitigation for Engelmann oaks shall be met, if possible (see MM 4.9-2). If an increase in on-site preservation occurs, the amount of off-site habitat acquisition shall be reduced accordingly. If creation is required, the amount of off-site habitat acquisition shall be reduced accordingly. The off-site acquisition shall occur in an unincorporated area of San Diego County. The habitat creation shall be implemented to the satisfaction of the County and CDFG in accordance with Section 1600 of the State Fish and Game Code. A conservation easement shall be placed across the off-site mitigation area to permanently protect the resource. If possible, individual oak trees shall be salvaged from impact areas and transplanted to appropriate open space habitat on site. The implementation of the mitigation shall be prior to or concurrent with construction or as otherwise determined in consultation with the County and CDFG.	
	MM 4.9-1e: Impacts to 0.2 acre of native perennial grassland shall be mitigated at a ratio of 2:1 by the acquisition of 0.4 acre of in-kind habitat in an unincorporated area of San Diego County, and a conservation easement shall be placed across the mitigation area to permanently protect the resource. Acquisition of grassland habitat shall occur as part of the acquisition of coast live oak woodland habitat (MM 4.9-1d) or Engelmann oak habitat (MM 4.9-2), if possible. The implementation of the mitigation shall be prior to or concurrent with construction or as determined in consultation with the County.	Less than significant
	MM 4.9-1f: Temporary construction fencing shall be erected under the supervision of a qualified biologist outside the delineated boundary of dedicated open space where it interfaces with impact areas and permanent fencing marked with signs shall be installed around the mitigation areas. Where impact areas are adjacent to coast live oak woodland, fencing shall be erected outside the canonv area at a distance of 1.5 times the canonv	Less than significant

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	radius of the outer trees. This fencing shall be erected prior to commencement of brushing or grading activities. The fencing (for example, strand wire or split rail) shall restrict human and equipment access but shall allow for wildlife movement.	
Impact 4.9-2: A total of 25 Engelmann oaks would be directly impacted as a result of the project. Since 100 percent of the population would be impacted, this impact would be significant.	MM 4.9-2: A 3:1 minimum replacement acreage (based on canopy area) of Engelmann oak trees shall be preserved within the same acquisition parcel for coast live oak woodland, if possible (see MM 4.9-1d). Otherwise, a separate acquisition of Engelmann oak trees at a 3:1 minimum replacement acreage shall be required in an unincorporated area of San Diego County. This acreage shall then be subtracted from the coast live oak woodland mitigation requirement (MM 4.9-1d) to avoid duplicate mitigation. A conservation easement shall be placed across the off-site mitigation area to permanently protect the resource. The implementation of the mitigation shall be prior to or concurrent with construction or as otherwise determined in consultation with the County.	Less than significant
Impact 4.9-3: The loss of approximately 3.1 acres of arroyo southwestern toad riparian breeding habitat from construction of the bridge would be significant.	MM 4.9.3a: In addition to the riparian habitat creation in MM 4.9-1b, implementation of a habitat enhancement program described in MM 4.9-18 shall be undertaken to mitigate impacts to arroyo southwestern toad riparian breeding habitat.	Less than significant
	MM 4.9.3b: The removal of toad riparian breeding habitat from riparian vegetation clearing and channel excavation for the bridge shall occur from October through December to minimize potential impacts to breeding adults (including potential sedimentation impacts to toad eggs) and dispersing juveniles.	Less than significant
Impact 4.9-4: Significant impacts resulting in the loss of approximately 306 acres of potential arroyo southwestern toad upland habitat within 2.0 kilometers of the river would occur from construction of the landfill and related facilities, construction of the upland portions of the access road, new grading for the on-site haul road, use of the two borrow/stockpile areas, habitat disturbance from the landfill gas and groundwater monitoring wells, and access road improvements for the San Diego Gas and Electric tower/line relocation. It should be noted that toads commonly travel up to 0.5	MM 4.9-4: The project preserves approximately 243 acres of sandy upland habitat adjacent to toad breeding habitat on site in addition to approximately 970 acres of other upland habitats. This preservation, in combination with the habitat enhancement program described in MM 4.9-18 would mitigate impacts to the loss of potential toad upland habitat.	Less than significant

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<i>kilometer from the stream and that the distance toads travel from breeding sites depends on topography and the extent of suitable habitat (USFWS 1999e). If only impacts to suitable upland areas on site are considered, the potential loss of upland habitat would be approximately 32 acres and would be significant.</i>		
Impact 4.9-5: <i>The potential loss of individual toads from construction of the landfill and related facilities and the access road/bridge would be significant. In addition, the potential loss of individual toads from roadkill due to traffic on the access road, haul road to Borrow/Stockpile Area A, and low-flow crossing would be significant.</i>	MM 4.9-5a: The construction zone for the bridge shall be fenced with exclusion fencing to prevent toad access to the construction zone. The fencing shall be a silt-screen type barrier comprised of a minimum 24-inch high fence with the remainder (minimum 12 inches) anchored firmly against the ground. The fence may be buried if necessary to exclude toad access. The fence locations shall be identified by a qualified biologist and adjusted as necessary. Exclusion fencing shall be monitored daily by a qualified biologist, and maintained in its original condition by construction personnel for the entire length of the construction period.	Less than significant
	MM 4.9-5b: Pre- and post- exclusion fencing surveys within the construction zone for the bridge shall be conducted for arroyo southwestern toads by a biologist permitted by the USFWS to handle the toad. Prior to construction commencement, a minimum of three surveys shall be conducted by this biologist following installation of the fencing. Daily surveys shall be conducted each morning prior to construction activity. Any toads found shall be relocated to appropriate similar habitat outside project impact areas and in dedicated open space.	Less than significant
	MM 4.9-5c: Exclusion fencing shall be installed along both sides of the access road for its entire length (except where sides of bridge act as barrier) as part of access road construction. The same exclusion fencing shall also wrap around the northern edge of the facilities area and continue east and south around the 1.8-acre desiltation basin. The fencing shall continue until the topography becomes too steep or rocky on the east side of the landfill footprint as determined by a qualified biologist. The fencing shall be of a corrugated metal or other similar durable material and shall be a minimum of 24 inches high.	Less than significant

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	MM 4.9-5d: A minimum of three surveys shall be conducted by a biologist permitted by the USFWS to handle the arroyo southwestern toad following installation of the exclusion fencing along the access road and prior to access road use. Any toads found shall be relocated to appropriate similar habitat outside project impact areas and in dedicated open space.	Less than significant
	MM 4.9-5e: A minimum of three surveys shall be conducted by a biologist permitted by the USFWS to handle the arroyo southwestern toad following installation of exclusion fencing around the facilities area and desiltation basin as described in MM 4.9-5c. Up to three additional surveys shall be conducted if favorable temperature and moisture conditions for toad activity have not already occurred during the first three surveys. Any toads found shall be relocated to appropriate similar habitat outside project impact areas and in dedicated open space.	Less than significant
	MM 4.9-5f: At least one toad undercrossing shall be installed in the fill beneath the access road north and south of the river. The design of the undercrossings shall be approved by the USFWS.	Less than significant
	MM4.9-5g: Exclusion fencing of the material and design described in MM 4.9-5c shall be installed on the north side of the haul road to Borrow/Stockpile Area A. The fencing shall be installed prior to initial project construction and shall be removed when initial project construction is complete, and the haul road is no longer in use. The exclusion fencing shall be re-installed prior to the use of Borrow/Stockpile Area A, which begins again in approximately year 25. The fencing shall be removed once the landfill is completely closed and the haul road is no longer in use.	Less than significant
	MM 4.9-5h: A minimum of three surveys shall be conducted by a biologist permitted by the USFWS to handle the arroyo southwestern toad following installation and re-installation of the exclusion fencing along the access road to Borrow/Stockpile Area A prior to its use. Up to three additional surveys shall be conducted during the use period if favorable temperature and moisture conditions for toad movement have not already occurred during the three original surveys. Any toads found shall be relocated to appropriate similar habitat outside project impact	Less than significant

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	areas and in dedicated open space.	
	MM 4.9-5i: Exclusion fencing of the material and design described in MM 4.9-5c shall be installed along both sides of the low-flow crossing until the road connects with the haul road described in MM 4.9-5g. The fencing shall be installed during initial project construction and shall be removed when initial project construction is complete, and the crossing is no longer in use. A minimum of three surveys shall be conducted by a biologist permitted by the USFWS to handle the arroyo southwestern toad following installation of the fencing, and daily surveys shall be conducted each morning prior to use of the low-flow crossing. Any toads found shall be relocated to appropriate similar habitat outside project impact areas and in dedicated open space.	Less than significant
Impact 4.9-6: Direct loss of individual toads could occur in association with proposed landfill project mitigation measures to create, restore and/or enhance riparian habitats and riparian/upland transition habitats on the landfill site as described in MM 4.9-18.	MM 4.9-6: The USFWS (1999c) has indicated in the Final Recovery Plan for the species that short-term negative effects to individual toads from such activities may be offset by the long-term positive effects of implementing such a habitat enhancement program. Therefore, the habitat enhancement plan described in MM 4.9-18 shall be implemented. The final plan shall include precautions where possible to avoid impacts to the arroyo southwestern toad.	Less than significant
Impact 4.9-7: Riprap associated with the access road bridge could harbor potential predators of the arroyo toad. This impact would be significant.	MM 4.9-7: Prior to final design, the bridge abutment design specifications shall indicate that gaps in the riprap be filled with concrete.	Less than significant
Impact 4.9-8: If the northernmost SDG&E transmission tower is replaced during the critical breeding period of the golden eagle (December through May) this would be a significant impact.	MM 4.9-8: The northernmost tower shall be replaced during the period of July through October to avoid the golden eagle breeding season.	Less than significant
Impact 4.9-9: Abandonment of the golden eagle nest site and territory, should it occur due to the project, would be a significant impact.	MM 4.9-9a: Access to the Gregory Canyon nesting site(s) shall be restricted to eagle specialists and researchers conducting monitoring.	Less than significant

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	MM 4.9-9b: Prior to ground disturbance, a pre-construction survey for the eagle pair shall be conducted to determine if and where the eagles are nesting on site. Weekly monitoring of the eagle pair shall be conducted by an eagle specialist during the breeding season (December through May) to confirm the eagle pair is exhibiting reproductive behavior patterns, such as nest building. After one year of construction activity, if the monitoring determines that the eagles have abandoned the site, the applicant shall create a habitat acquisition fund for purchase and preservation of off-site known or potential golden eagle nesting habitat or shall purchase an equivalent amount of golden eagle nesting habitat to be included in the MSCP Preserve. The amount of funding or habitat purchase shall be negotiated with the County.	Less than significant
	MM 4.9-9c: Initial landfill construction activity less than 2,000 feet from the eagle's nest shall begin as close to the end of the eagle breeding season in June, to allow the eagle pair on site to become conditioned to the activity prior to the next breeding season starting in December.	Less than significant
Impact 4.9-10: Movement of the southernmost SDG&E tower proposed for relocation while the red-tailed hawk nest is active (likely between December and May) would not be allowed under the Migratory Bird Treaty Act. Likewise, removal of any raptor nest while it is active would not be allowed under the act.	MM 4.9-10: The southernmost tower shall be moved during the period of June through November or at any time when the nest is not active. Likewise, any raptor nest removal shall only occur when the nest is inactive. A qualified biologist shall determine whether or not a raptor nest is active.	Less than significant
Impact 4.9-11: Direct impacts to least Bell's vireo and southwestern willow flycatcher habitat including 2.4 acres of southern willow scrub and 0.2 acre of mule fat scrub would be significant.	MM 4.9-11a: Removal of any riparian habitat shall only occur from October through December to avoid the breeding seasons of these bird species and to minimize potential impacts to the arroyo southwestern toad.	Less than significant
	MM 4.9-11b: Impacts to vireo and flycatcher habitat shall be mitigated through riparian habitat creation as described under MM 4.9-1b. The habitat enhancement described under MM 4.9-18 would also benefit these species.	Less than significant
	MM 4.9-11c: The project applicant shall provide funding for cowbird trapping along the San Luis Rey River on the project site for a period of five years from initial landfill operation.	Less than significant

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Impact 4.9-12: Initial construction, including the use of the low-flow crossing, and bridge construction could produce short-term construction noise that would potentially exceed the 60 dB(A) L_{eq} threshold during the vireo breeding season (March 15th through September 15th) and the southwestern willow flycatcher breeding season (late April through mid-September) resulting in a significant noise impact.	MM 4.9-12a: Daily noise monitoring by a qualified acoustician shall be conducted between March 15 and September 15 during initial construction to verify that noise levels are below 60 dB(A) L_{eq} in vireo and flycatcher habitat. If the 60 dB(A) L_{eq} is exceeded, the acoustician shall work with the construction contractor to make operational changes and/or barriers designed by the acoustician shall be installed prior to March 15, or immediately if during the breeding season, to reduce noise levels during the breeding season. Weekly noise monitoring shall occur following operational changes and/or installation of barriers to ensure their effectiveness. If ineffective, the acoustician shall work with the construction contractor to make additional operational changes or to install other barriers that would reduce noise to less than 60 dB(A) L_{eq} .	Less than significant
	MM 4.9-12b: The low-flow crossing shall only be used between September 15th and March 15th. Use of the crossing could occur outside of that time period if daily monitoring by a qualified biologist determines that vireos and flycatchers have not yet arrived on site or have migrated out of the area early, or if operational changes can be made and/or barriers designed by an acoustician can be installed prior to March 15 to reduce noise levels to less than 60dB(A) L_{eq} in the vireo and flycatcher habitat. Daily noise monitoring shall be conducted in accordance with MM 4.9-12a and noise reduction measures contained in MM 4.9-12a shall be implemented, if necessary.	Less than significant
	MM 4.9-12c: Bridge construction shall only occur between September 15 and March 15 unless daily monitoring by a biologist during the breeding season determines that vireos and flycatchers have not yet arrived on site or have migrated out of the area early or if operational changes can be made and/or barriers designed by an acoustician can be installed prior to March 15 to reduce noise levels to less than 60 dB(A) L_{eq} in vireo and flycatcher habitat. Daily noise monitoring shall be conducted in accordance with MM 4.9-12a and noise reduction measures contained in MM 4.9-12a shall be implemented, if necessary.	Less than significant

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Impact 4.9-13: Implementation of the riparian habitat creation and restoration and/or enhancement program (required as mitigation to offset direct impacts to the least Bell's vireo and southwestern willow flycatcher) could significantly impact these species through excessive equipment noise if installation occurs during their breeding seasons.	MM 4.9-13: Mitigation activities shall only occur between September 15 and March 15 unless operational changes can be made and/or barriers designed by an acoustician can be installed prior to March 15 to reduce noise levels to less than 60 dB(A) L_{eq} in vireo and flycatcher habitat. Daily noise monitoring shall be conducted between March 15 and September 15 to verify that the measures are effective. If the 60 dB(A) L_{eq} is exceeded, the acoustician shall work with the contractor to make additional operational changes or to install additional barriers that would reduce noise to less than 60 dB(A) L_{eq} .	Less than significant
Impact 4.9-14 Approximately 4.8 acres on site and 4.6 acres off site of vireo and flycatcher habitat would be significantly impacted by traffic noise caused by the project.	MM 4.9-14a: A total of 4.8 acres of vireo and flycatcher habitats (0.2 acre of cottonwood-willow riparian forest, 0.8 acre of mule fat scrub, and 3.8 acres of southern willow scrub) shall be created on the landfill site in dedicated open space in an area that would not be affected by noise levels equal to or greater than 60 dB(A) L_{eq} (Exhibit 4.9-5) in conjunction with that created on site for direct impacts as described in MM 4.9-1b and MM 4.9-1c.	Less than significant
	MM 4.9-14b: The project applicant shall purchase and conserve in perpetuity 2.4 acres of off-site vireo and flycatcher habitat that would not be affected by noise levels of 60 dB(A) L_{eq} or greater as a result of project-generated or cumulative traffic. A conservation easement shall be placed across the off-site mitigation area to permanently protect the vireo and flycatcher habitat. The implementation of the mitigation shall be prior to or concurrent with construction or as otherwise determined in consultation with the County.	Less than significant
Impact 4.9-15: Noise produced by landfill equipment operating at the closest point to vireo and flycatcher habitat within the landfill footprint and Borrow/Stockpile Area A (approximately 520 feet away) would potentially create noise levels in excess of 60 dB(A) L_{eq} in that habitat, resulting in a significant impact during the vireo and flycatcher breeding seasons.	MM 4.9-15a: A temporary 12-foot-high wall or berm shall be constructed along the northern edge of Borrow/Stockpile Area A outside the vireo/flycatcher breeding season (March 15 to September 15) and prior to the use of Borrow/Stockpile Area A. The barrier can be removed once topography provides the necessary noise barrier to reduce noise levels in the habitat during the breeding seasons to less than 60 dB(A) L_{eq} .	Less than significant
	MM 4.9-15b: Noise monitoring shall be conducted weekly for up to one month by a qualified acoustician to verify that operational noise levels are below 60 dB(A) L_{eq} in vireo and flycatcher	Less than significant

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	habitat. If noise levels equal or exceed 60 dB(A) L_{eq} , a 16-foot-high permanent noise wall shall be installed prior to the vireo breeding season (March 15th to September 15th, includes flycatcher breeding season) or immediately if during the breeding season. If noise levels exceed 60 dB(A) L_{eq} during the breeding season, operational changes shall be made to reduce noise levels to less than 60 dB(A) while the noise wall is being constructed. The noise wall shall be constructed east of the knoll between the internal haul road and the top of slope for the facilities area to block truck noise emanating into the habitat.	
Impact 4.9-16: Potential impacts from vegetation trampling and/or trail creation would be significant because of the edge effects these activities could create.	MM 4.9-16: Throughout the life of the project, access routes shall be restricted to existing roads, and entry into non-impact areas shall be restricted by the landfill operator. Areas not directly impacted by the project shall be posted with signs precluding access due to habitat sensitivity. A public education program shall be developed by a qualified biologist and shall be implemented to inform landfill staff and visitors about access restrictions and the sensitivity of habitats on site.	Less than significant
Impact 4.9-17: The potential for non-native plant species invasion would be significant for the area of channel excavation associated with construction of the bridge and for temporary and permanent slopes.	MM 4.9-17a: Control of invasive, exotic plant species shall occur as described in the habitat enhancement plan presented in MM 4.9-18 and shall include the channel excavation area associated with construction of the bridge.	Less than significant
	MM 4.9-17b: Temporary and permanent slopes shall be revegetated with native species to inhibit the growth of non-natives.	Less than significant
Impact 4.9-18: Loss of habitats, habitat fragmentation, decreased water quality, night lighting, human activity, and the introduction of non-native plant species are cumulatively significant impacts to which the project would contribute. In addition, during the life of the landfill, cumulatively significant indirect traffic noise impacts that could affect the breeding success of endangered bird species inhabiting this portion of the river could occur. Finally, landfill operations and cell construction could be on-going throughout the Pipeline No. 6 construction period and could lead to periodic cumulative impacts.	MM 4.9-18: The project applicant shall implement a habitat enhancement plan to improve the San Luis Rey River watershed on site as described below and detailed in Appendix L of this document. Beyond the mitigation obligation associated with compensating for direct and indirect project impacts to vegetation communities, the project applicant for the Gregory Canyon Landfill shall be required to implement a habitat enhancement program for improvements to the San Luis Rey River watershed. In addition to the proposed open space dedication (1,313 acres), the project	Less than significant

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	<p>applicant shall restore approximately 88 acres of upland and 13 acres of riparian area within the portion of the San Luis Rey River corridor contained on site (Exhibit 4.9-5). The restoration will likely be phased and not occur all at one time.</p> <p>The habitat enhancement program shall focus on the restoration of riparian and upland habitats within the San Luis Rey River floodplain on site above and beyond the project's direct mitigation obligations for vegetation community impacts. The San Luis Rey River has been identified as one of the most easily restorable rivers in southern California (ACOE 1981). This portion of the program shall consist of the restoration of lost and/or damaged habitat and water quality caused by the long-term agricultural use of the property and the removal of highly invasive, exotic plant species. The project applicant is proposing to remove the existing Verboom dairy operations and most structures and all equipment associated with the Verboom and Lucio dairies from the site in concert with the initial construction of the landfill. Under this enhancement program, man-made berms and weed seed banks in the river's watershed shall be excavated to restore more historic river flows and invasive, non-native plant species would be replaced with native plantings. The excavation shall be focused on bringing the ground elevations down to level that would connect the areas hydrologically with the existing groundwater system and to create a series of terraces that taper into the existing upland habitat. The excavation would be done in a manner that would prevent adverse effects on upstream and downstream properties. All upland and drier riparian areas shall be planted with tree species known from the site and hand-seeded to initiate native plant re-establishment. Weed control and monitoring shall be implemented regularly during the first five years of the project to prevent the re-establishment of non-native plant species. The goal of the restoration shall be to provide breeding and upland habitat for endangered species and widen the vegetative buffer around the riparian corridor present on site.</p> <p>The dedicated open space on site, including the restored river corridor, shall be managed with a financial contribution provided by the project applicant. The project applicant shall work with the</p>	

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	USFWS and the CDFG to identify a qualified conservancy or other non-profit organization to be responsible for implementing long-term management activities for the restored river. The type of management activities shall depend upon the condition of the site, the resources present, and the funds available to manage those resources. Management activities shall include restrictions on vehicular and human access through the installation of fencing and signs, control of exotic species [e.g., brown-headed cowbirds and giant reed (<i>Arundo donax</i>)], control of illegal dumping, and monitoring endangered species populations.	
	4.10 PALEONTOLOGICAL RESOURCES	
Impact 4.10: <i>The proposed project could disrupt or destroy unique paleontological resources during construction of the proposed landfill and related facilities. Such resources are potentially preserved in the Quaternary alluvium.</i>	MM 4.10-1a: Prior to issuance of the grading permit by the County, the applicant shall retain a qualified paleontologist to monitor excavations on site. Initially monitoring shall occur eight hours per week (e.g., two four-hour days or four two-hour days) during earthmoving activities in the Quaternary Alluvium. (This earthwork is to occur during construction of the bridge footings and roads and the excavation of the borrow sites.) The contractor shall notify the qualified paleontologist at the time such activities will be initiated so that a monitor can be present. (A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials. The paleontological monitor shall work under the direction of a qualified paleontologist.) The applicant shall submit a letter to the Department of Environmental Health identifying the monitor. Weekly letters shall be prepared by the monitor and provided to the Department of Environmental Health.	Less than significant
	MM 4.10-1b: If unique fossils are discovered, the applicant shall have a qualified paleontologist (or paleontological monitor) recover them. If an extended salvage period is required, the paleontologist (or paleontological monitor) shall be allowed to temporarily direct, divert, or halt grading to allow recovery of fossils in a timely manner. If necessary, the paleontologist shall be allowed to set up a screen-washing operation to process the matrix to bulk sample selected geologic beds. If unique fossils are found, the applicant's paleontologist shall provide a letter to the Department of Environmental Health documenting the find and	Less than significant

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	procedures followed on site.	
	MM 4.10-1c: The applicant shall have a qualified paleontologist clean, repair, and catalog any fossil remains collected during monitoring and salvage operations. Prepared fossils, along with copies of all pertinent field notes, photos, and maps, shall be deposited (as a donation) in a scientific institution with permanent paleontological collections such as, the San Diego Natural History Museum. Donation of the fossils shall be accompanied by financial support from the applicant for initial specimen storage. If fossil remains are found, the Department of Environmental Health shall review the preserved materials.	Less than significant
	MM 4.10-1d: The applicant shall have a qualified paleontologist prepare regular biannual progress reports during earth moving activities in the Quaternary Alluvium (this earthwork to occur during construction of the bridge footings and roads and the excavation of the borrow sites) and a final summary report that outline the results of the resources mitigation program. These reports shall include discussions of the methods used, stratigraphic section(s) exposed, fossils collected, and the significance of recovered fossils. These reports shall be submitted to the Department of Environmental Health.	Less than significant
	4.11 ARCHEOLOGICAL AND CULTURAL RESOURCES	
This is a Proposition C mitigation measure	MM 4.11.C5P: Impacts to Native American resources impacted by the Project shall be mitigated through the development of a Memorandum of Agreement (MOA) between the Applicant and the appropriate regulatory agencies in accordance with Section 106 of the National Historic Preservation Act. To mitigate archaeological impacts caused by the Project, the Applicant shall retain a qualified archaeologist to investigate and recommend appropriate mitigation measures. These mitigation measures shall be implemented by the Applicant.	This is a Proposition C mitigation measure
Impact 4.11-1: The proposed project would destroy CA-SDI-14,607/H, the Higgins Family Cemetery (Historic), a significant/CR-eligible cultural site.	MM 4.11-1: Prior to project activity occurring at the cemetery, the applicant shall remove the cemetery by excavation of burials and rebury in a nearby active cemetery. Exhumation and re-interment of all remains from this cemetery shall be conducted in	Less than significant

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	accordance with Section 7050.5 of the California Health and Safety Code.	
Impact 4.11-2: <i>The proposed project could disturb or destroy previously unknown significant cultural sites that may be exposed during earth-moving activities.</i>	<p>MM 4.11-2: It is possible that additional cultural resources could be discovered during grading and construction. Therefore, prior to issuance of a grading permit, the applicant shall retain a professional, registered archaeologist who is approved by the County and, if appropriate, a Native American monitor, who is selected from a list of suitable candidates obtained from the Native American Heritage Commission. The archaeologist and, if appropriate, the Native American monitor shall implement a monitoring and data recovery program to the satisfaction of the County's Director of Planning and Land Use, to mitigate potential impacts to previously undiscovered archaeological resources. The monitoring program shall consist of the monitor(s) attending a pre-grading meeting with the contractors to explain and coordinate the requirements of the program. In addition, the archaeologist and, if appropriate, the Native American monitor shall monitor initial grading and ground surface preparation on all previously undisturbed areas. The requirements of the monitoring program shall be noted on the final grading or improvement plan and all site workers shall be informed in writing by the project archaeologist of the restrictions regarding disturbance and removal of cultural resources as well as procedures to follow should a resource deposit be detected.</p> <p>In the event of notification by the project archaeologist that a potentially significant or unique find has been unearthed, grading operations shall cease immediately in the area of the find until the geographic extent and scientific value of the resource can be reasonably verified. Isolates and clearly non-significant deposits shall be minimally documented in the field. If significant archaeological materials are discovered, the County archaeologist shall be consulted and the resources shall be recorded and recovered using standard professional archaeological methods. Once recovered, such resources shall be cleaned, catalogued, and permanently curated according to current professional repository standards. Construction in the affected area shall not resume until the archaeologist determines it to be appropriate.</p>	Less than significant

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	<p>In the event that human remains are discovered, other than those located at the Higgins Family Cemetery, during the monitoring program, there shall be no further excavation or disturbance of the site, nor shall there be any disposition of such human remains, other than in accordance with the procedures and requirements set forth in Section 7050.5 of the California Health and Safety Codes. If Native American burial sites are discovered, the project shall comply with the Public Resources Code 5097.98 and CEQA Guidelines Section 15064.5(e).</p> <p>Upon completion of earth disturbing activities and prior to operation of the project, the archaeological monitor shall prepare a report documenting the findings. This report shall be completed to the satisfaction of the County's Director of Planning and Land Use.</p>	
<p>Impact 4.11-3: Increased human activity within the project site could lead to unintentional disturbance (i.e., indirect effects) of significant/CR-eligible cultural sites, or intentional disturbance due to vandalism. These sites include: CA-SDI-683; CA-SDI-744B/12,584 A and B; CA-SDI-12,585; CA-SDI-14,609; and CA-SDI-14,610H.</p>	<p>MM 4.11-3: Prior to commencement of any construction activities, the applicant shall have a registered, professional archaeologist who is approved by the County and, if appropriate, a Native American monitor who is selected from a list of suitable candidates obtained from the Native American Heritage Commission provide measures to ensure the avoidance of impacts to known significant/CR-eligible cultural sites that could be indirectly affected by the proposed project (including: CA-SDI-683; CA-SDI-744B/12,584 A and B; CA-SDI-12,585; CA-SDI-14,609; and CA-SDI-14,610H). Such measures, which would serve to prohibit access to these sites, may include fencing, barricades, or remote monitoring devices. These devices shall be installed by the applicant prior to disturbance in the area of the above sites.</p> <p>In addition, the archaeologist and, if appropriate, the Native American monitor shall implement a monitoring program to the satisfaction of the County's Director of Planning and Land Use. The requirements of the monitoring program shall be clearly noted on the final grading or improvement plan and all site workers shall be informed in writing of the restrictions and procedures of the program. In addition, the monitor(s) shall attend a pre-grading meeting with the contractors to explain and coordinate these requirements as they pertain to these significant/CR-eligible</p>	Less than significant

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	<p>cultural sites.</p> <p>In addition, the archaeologist and, if appropriate, the Native American monitor shall monitor initial grading and ground surface preparation on all previously undisturbed areas. Concurrent to the monitoring of grading, the monitor(s) shall identify and evaluate whether adverse impacts (e.g., erosion, looting, vandalism, etc.) have occurred at any of these sites.</p> <p>In the event that monitoring reveals deteriorating conditions at any of the significant/CR eligible cultural sites, the County archaeologist shall be consulted and the appropriate site preservation and/or data recovery efforts shall be implemented. Such efforts could include implementation of erosion control measures, capping of the affected portion of the site, or planting of native vegetation. If the monitor(s) determine that deterioration has resulted from landfill operations, a change in operational methods may be required.</p> <p>Upon completion of earth disturbing activities, the archaeological monitor shall prepare a report. The report shall include the results of the fieldwork and all appropriate laboratory and analytical studies that were performed in conjunction with any resource excavation that may have been performed. Such analyses could include radiocarbon dating, hydration and sourcing analysis, and mass spectrometer and thin sectioning, as appropriate. The report shall be submitted to the County's Director of Planning and Land Use for review and approval prior to operation of the project.</p>	
<p>Impact 4.11-4: Data contained in the material previously collected from CA-SDI-745, Locus A could potentially be lost in the absence of measures outlining the steps that should be taken in documenting, analyzing, and curating these resources. In addition, there is a potential for the project to impact previously undiscovered materials from CA-SDI-745, Locus F.</p>	<p>MM 4.11-4: The Research Requirements and Research Design for CA-SDI-745, included in Appendix N of this Final EIR, shall be followed. The Research Requirements and Research Design guides the analysis and curation of resources already recovered from Locus A and outlines the steps necessary for the completion of additional fieldwork and monitoring at Locus F. Included therein is the requirement for artifacts to be processed and curated according to current professional repository standards and transferred, including title, to an appropriate curation facility within San Diego County. The applicant is also required to pay the necessary fees for permanent curation. A report documenting the analysis and fieldwork results shall be prepared and submitted</p>	Less than significant

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	to the satisfaction of the County's Director of Planning and Land Use.	
Impact 4.11-5: Data contained in the material previously collected from CA-SDI-14,611H, the Maggie Lovell Homestead, could potentially be lost in the absence of measures outlining the steps that should be taken in documenting, analyzing, and curating these resources.	MM 4.11-5: A complete analysis of materials collected from CA-SDI-14,611H, the Maggie Lovell Homestead, shall be conducted under the supervision of a registered, professional archaeologist. These artifacts shall be processed and curated according to current professional repository standards and shall be transferred, including title, to an appropriate curation facility within San Diego County. The applicant shall pay the necessary fees for permanent curation. A report documenting the analysis results shall be prepared and submitted to the satisfaction of the County's Director of Planning and Land Use prior to operation of the project.	
Impact 4.11-6: Increased human activity within the project site could lead to unintentional indirect disturbances of CA-SDI-313/4356 (Medicine Rock), which is located on private property to the north of the project site	MM 4.11-6a: Increased intervals of water application (every three hours) on access roads, stockpiles, and cleared areas will mitigate impacts from dust to a less than significant level. Landscaping shall be installed between the landfill and CA-SDI-313/4,356 will serve as a dust screen and will reduce visual impacts created by fugitive dust and landfill operations. The landscaping should be installed a sufficient distance from the project site so as not to create a fire hazard.	Less than significant
	MM4.11-6b: In addition to mitigation measures MM 4.11-6a, the applicant shall have a professional rock art conservator provide baseline data and periodically assess the condition of Medicine Rock. The method for monitoring shall be developed in consultation with the Pala Band of Mission Indians and approved by County DEH. Baseline data shall be collected prior to any construction activity on the project site. Because the archaeological site is not located on the project site or on the Pala Reservation, implementation of the measure would require approval by the adjacent property owner.	Less than significant

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	4.12 ETHNOHISTORY AND NATIVE AMERICAN INTERESTS	
This is a Proposition C mitigation measure	MM 4.12.C5P Impacts to Native American resources impacted by the Project shall be mitigated through the development of a Memorandum of Agreement between the Applicant and the appropriate regulatory agencies in accordance with Section 106 of the National Historic Preservation Act. ¹⁰ To mitigate archaeological impacts caused by the Project, the Applicant shall retain a qualified archaeologist to investigate and recommend appropriate mitigation measures. These mitigation measures shall be implemented by the Applicant.	This is a Proposition C mitigation measure
Impact 4.12-1: <i>The project would result in long-term physical alterations to Gregory Canyon which is at the base of the sacred Gregory Mountain cultural resource. In addition, the landfill operations could disrupt any ongoing traditional Native American activities associated with this resource.</i>	MM 4.12-1a: Prior to commencement of operation of the landfill and as partial fulfillment of MM 4.1-2, the applicant shall either dedicate the portion of the site east of the landfill footprint and relocated SDG&E easement including the western slopes and the top of Gregory Mountain, as permanent open space or execute and convey a permanent open space easement over this area.	Significant
	MM 4.12-1b: Prior to commencement of operation of the landfill the applicant shall execute and record an access easement to the Pala Band of Mission Indians from the western boundary of the land owned by the Pala Band of Mission Indians to the summit of Gregory Mountain. The access easement shall grant the Pala Band of Mission Indians the right to walk or hike only within the access easement area.	Significant
	MM 4.12-1c: Should the Pala Band agree, the applicant shall, upon commencement of operation of the landfill, pay to the Pala Band of Mission Indians a fixed dollar amount as determined below. Such amount shall be used by the Pala Band to implement measures to enhance and improve access to Gregory mountain from the Pala Reservation. Such measures may include, but are not limited to, a new footpath, clearing of an existing footpath, or the marking of new footpath trail as determined by Pala in its sole discretion. Such dollar amount shall be equal to the estimated cost of restoring the footpath that previously existed from the eastern	Significant

¹⁰ Section 106 consultation under the NHPA, if and to the extent required, will occur with issuance of the nationwide permit.

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	base of Gregory Mountain to the top of the mountain. This estimate shall be obtained by the applicant from a company experienced in restoring footpaths.	
	MM 4.12-1d: In addition to the construction of the trail, should the Pala Band agree, the applicant shall provide funding as needed for the annual maintenance of the trail from the eastern base to the top of the mountain during the operational life of the landfill.	Significant
	MM 4.12-1e: The applicant shall postpone landfilling activities on the western slope of Gregory Mountain above the existing San Diego Gas & Electric transmission line for as long as its practically possible.	Significant
Impact 4.12-2: The project would create dust impacts to the areas of Medicine Rock and Gregory Mountain during high wind periods.	MM 4.12-2a: The applicant shall apply water on access roads, storage piles, and cleared areas in greater intervals, such as every three hours, during high wind periods to reduce the dust generated by vehicles.	Less than significant
	MM 4.12-2b: The applicant shall install landscaping between the landfill operations and Medicine Rock to create a dust screen. The landscape screen shall include shrubs and trees, such as manzanita and ceanothus.	Less than significant
Impact 4.12-3: The project would create short-term construction noise impacts at the ridgeline of Gregory Mountain during the relocation of the SDG&E transmission towers.	MM 4.12-3: The applicant shall monitor noise levels at the ridgeline during the relocation of the SDG&E transmission towers. If noise levels exceed 62.5 dBA L_{eq} at the ridgeline, the applicant shall implement some or all of the following measures to reduce the noise levels to below 62.5 dBA L_{eq} : <ul style="list-style-type: none"> • Build temporary noise barriers or berms between construction activities and the ridgeline. Design parameters (e.g., height, length, and location) for these temporary noise barriers or berms shall be determined by a qualified noise expert. • Reduce the amount or size of construction equipment. For example, equipment with smaller engines could be used. If the 62.5 dBA L_{eq} threshold is not exceeded, no action beyond monitoring shall be necessary.	Less than significant

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION																
Impact 4.12-4: The project would result in the loss of ethnobotanical resources associated with the coastal sage scrub, coast live oak woodland, native perennial grassland, cottonwood-willow riparian forest, southern willow scrub and mulefat habitats.	MM 4.12-4: The project shall mitigate for the loss of ethnobotanical plants in southern willow scrub, mulefat scrub, cotton-willow riparian forest, and native perennial grassland by the creation of in-kind habitats on the landfill site that include ethnobotanical species listed in Appendix O. This revegetated habitat shall be incorporated into the Habitat Enhancement Plan and/or the dedicated open space areas. Before the mitigation plans for these areas are finalized, the Tribe would have the opportunity to provide input concerning the selection of specific ethnobotanical resources. In addition, the Tribe shall be given the opportunity to provide input regarding the location of the in-kind habitats to ensure that tribal members have adequate access to the areas.	Less than significant																
	4.13 AESTHETICS																	
This is a Proposition C mitigation measure	MM4.13.C50: In order to mitigate visual impacts associated with the Project, the Applicant shall employ extensive use of landscaping emphasizing native vegetation, and rounding/undulation of slopes on the refuse column and changes in slope angles. All landscaping shall be performed by a licensed landscape architect in the State of California. This licensed architect shall prepare a detailed landscape plan designed to minimize visual impacts associated with the Project to the maximum feasible extent. The plan prepared [by] the licensed architect shall be implemented by the Applicant upon completion.	This is a Proposition C mitigation measure																
Impact 4.13-1: The project would result in the following significant aesthetics impacts:	MM 4.13-1: As required by Proposition C, an overall conceptual landscape treatment plan shall be prepared by a licensed landscape architect and a qualified biologist incorporating the detailed measures for each project element as indicated in MM 4.13-2 through MM 4.13-10. The conceptual landscape plan is shown in Exhibit 4.13-18. The plan shall address the timing of the installation of each element. The elements shall be implemented so as to provide the necessary screening but also to allow efficient operation of the project. The landscape treatment plan shall be approved by the Department of Environmental Health prior to the operation of the landfill.	Less than significant for all project elements except landform quality resulting from the landfill footprint																
<table><tr><td><u>PROJECT ELEMENT</u></td><td><u>AESTHETICS IMPACT AREA</u></td></tr><tr><td>Bridge & Channel Excavation</td><td>Visual Resources</td></tr><tr><td>Ancillary Facilities</td><td>Visual Character/Quality</td></tr><tr><td>Borrow/Stockpile Area B</td><td>Landform Quality; Visual Character/Quality</td></tr><tr><td>Borrow/Stockpile Area A</td><td>Landform Quality</td></tr><tr><td>Landfill</td><td>Landform Quality; Visual Character/Quality;</td></tr><tr><td></td><td>Visual Resources</td></tr><tr><td>Tower Relocation</td><td>Landform Quality</td></tr></table>	<u>PROJECT ELEMENT</u>	<u>AESTHETICS IMPACT AREA</u>	Bridge & Channel Excavation	Visual Resources	Ancillary Facilities	Visual Character/Quality	Borrow/Stockpile Area B	Landform Quality; Visual Character/Quality	Borrow/Stockpile Area A	Landform Quality	Landfill	Landform Quality; Visual Character/Quality;		Visual Resources	Tower Relocation	Landform Quality		
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Tower Relocation	Landform Quality																	

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Impact 4.13-2: <i>Based on the landfill's location with respect to landscape units with moderate to high visual quality and moderate to high sensitivity to change, the landfill would have a significant effect on the visual quality of the area.</i>	MM 4.13-2a: Existing trees and shrubs along SR 76 shall be saved and supplemented by like species and other fast growing trees to create a naturally landscaped transportation corridor through the property, where appropriate to screen the landfill. All on-site highway frontage along the south side of SR 76, shall be planted with a minimum 20-foot wide screen of native or indigenous trees and shrub species. The applicant's landscape architect shall verify to the County Department of Environmental Health in writing within two years of commencement of the landfill operation that this measure has been implemented.	Less than significant
	MM 4.13-2b: Major tree groupings and transplants as well as native revegetation and rock outcrop placement shall be completed along the edges of the landfill. The placement shall not be too far out from the sides of the landfill, taking into consideration the drainage and settlement of the landfill. A transitional blending of the flat landfill face shall be undertaken along the bottom and perimeter edges where it meets the existing terrain. Large boulders and trees could be placed to resemble the ribbon of oak woodland impacted by the landfill. Tree groupings could be placed in groves below existing swales that contain oaks and sycamores. This extension of natural vegetation communities would help break the geometric lines of the landfill and would help the face blend with the surrounding hillsides. The applicant's landscape architect shall verify to the County Department of Environmental Health in writing after implemented as determined in the landscape plan.	Less than significant
	MM 4.13-2c: Permanent slopes shall be stabilized with appropriate native plant seed mix and container stock around the edges. In some cases, where phasing may result in changes and/or transitions to the slopes, more temporary erosion control techniques could be utilized. The County Department of Environmental Health shall field verify implementation of this measure.	Less than significant
	MM 4.13-2d: Any landfill slope that would remain unchanged beyond one full year shall be hydroseeded or revegetated. Revegetation shall take into account the contrast, color, and	Less than significant

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	texture so that it can blend back into the local setting. The County Department of Environmental Health shall field verify implementation of this measure.	
	MM 4.13-2e: Drainage and methane extraction structures and pipes shall be painted or be made of materials that fit into the local color environment and that match adjacent textures. Painting of the structures, pipelines and other facilities associated with surface drainage, subsurface drainage and methane gas control would help blend them into the background of the areas that they are traversing. At the time of installation of the drainage and methane extraction structures and pipes, the operator shall provide a letter to the San Diego Air Pollution Control District and the County Department of Environmental Health indicating that the measure has been implemented.	Less than significant
	MM 4.13-2f: Brow ditches shall be constructed with outside bench lips slightly higher than inside edges. Culverts and other pipelines connecting brow ditches shall be painted to blend with landfill slopes. Integral or stained color shall be used on all brow ditches. A natural brown, beige or sand colored staining shall be used so that the ditch will not contrast with adjacent colors. Painting of miscellaneous structures shall use a variety of colors that match the revegetation patch and soil color that the pipeline is going through. At the time of installation of the brow ditches, culverts and pipelines, the operator shall provide a letter to the County Department of Environmental Health indicating that the measure has been implemented.	Less than significant
	MM 4.13-2g: The applicant shall explore the feasibility of obtaining a landscape easement along SR 76 to the west of the site on the adjacent property or the Caltrans right-of-way as shown on Exhibit 4.13-17 of the Final EIR. The easement, if obtained, shall be planted with a screen of native or indigenous trees and shrub species to create a naturally landscaped transportation corridor similar to the screening on the project site. The landscaping shall provide screening of the landfill for drivers traveling west along SR 76 towards the site.	Less than significant

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Impact 4.13-3: <i>The engineered landfill face would sharply contrast with surrounding natural landforms and would have a significant effect on the landform quality of the area.</i>	MM 4.13-3: The benches and lifts shall be graded to minimize the significant landform quality impact. Blending of created landforms with adjacent landforms can be achieved by manipulating the landform to resemble or meld with its surroundings, planting to create the pattern resembling the adjacent vegetation matrix and its colors, and incorporating boulders into the final grades to create the rocky texture of the surrounding hillsides. The County Department of Environmental Health shall field verify implementation of this measure.	Significant
Impact 4.13-4: <i>The landfill would cause the loss of visual resources such as oak trees, native vegetation and rock outcrops in Gregory Canyon. Therefore, the landfill would have a significant effect on the visual resources of the area.</i>	MM 4.13-4: Areas within public view, such as along SR 76, adjacent to the facility area or within the abandoned Lucio Dairy parcels, shall be revegetated to mitigate for the loss of visual resources in accordance with the landscape plan (MM 4.13.1). The revegetation shall contain both oak woodland habitats and riparian plantings. Wherever possible, boulders and rock outcrops should be relocated from disturbed areas to replanted areas. The plan shall incorporate and compliment the mitigation for biological resources (Section 4.9). The revegetation shall be implemented within two years after the commencement of the landfill operation.	Less than significant
Impact 4.13-5: <i>The bridge construction and excavation of the river channel would result in the loss of major riparian trees, which is a significant impact to visual resources.</i>	MM 4.13-5: Large riparian trees along with the associated understory found within these riparian zones shall be planted along the access road and bridge to screen the project elements and the excavation in accordance with the landscape plan (MM 4.13.1). The plan shall incorporate and compliment the mitigation for biological resources (Section 4.9). Landscaping shall be installed immediately after completion of the access road and bridge and implementation of this measure shall be verified in writing to the County Department of Environmental Health by the applicant's landscape architect.	Less than significant

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Impact 4.13-6: <i>Since the ancillary facilities do not appear to be part of the natural or agricultural character of the area, they would contrast and be visible to many of the SR 76 viewers. The ancillary facilities area would have a significant impact on the visual quality of the area.</i>	MM 4.13-6a: In consultation with the landfill engineer, rock outcrops removed from the landfill footprint shall be placed in strategic locations around the facilities area. Implementation of this measure shall occur after completion of the facilities area or in accordance with the landscape plan (MM 4.13.1). Completion of this measure shall be verified in writing to the County Department of Environmental Health by the applicant's landscape architect.	Less than significant
	MM 4.13-6b: Areas adjacent to the ancillary facilities area and next to the water tank shall be planted with mature trees in major tree groupings to screen visual access to those structures. In addition, disturbed slopes shall be revegetated with native species. These concepts and the timing of implementation shall be incorporated into the landscape plan (MM 4.13.1). Completion of this measure shall be verified in writing to the County Department of Environmental Health by the applicant's landscape architect.	Less than significant
	MM 4.13-6c: The facilities and miscellaneous structures shall be painted or be made of materials that fit into the local color environment and shall also match adjacent textures. Implementation shall be field verified by the County Department of Planning and Land Use—Building Division after construction of the facilities area.	Less than significant
Impact 4.13-7: <i>The western desilting basin would cut into the facing slope adjacent to the aqueduct area. This grading would constitute a potentially significant visual quality impact for SR 76 viewers.</i>	MM 4.13-7: Landscape plans shall include vegetative screening on the side slopes and in areas below the crest to hide the grading for the western desilting basin. Landscaping shall be installed after completion of the western desilting basin. The applicant's landscape architect shall verify in writing to the County Department of Environmental Health that this measure has been implemented.	Less than significant
Impact 4.13-8: <i>Borrow/Stockpile Area A would be highly visible because of the difference in the overall size and form of the stockpile from the adjacent area, resulting in a significant impact on the landform quality of the area.</i>	MM 4.13-8a: Landform screening shall be implemented, including major tree groupings, at the edges of the Borrow/Stockpile Area A to help block the views of the area. The Department of Environmental Health shall field verify the implementation of this measure after commencement of operation.	Less than significant

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	MM 4.13-8b: The project grading plan shall include contouring of landforms to help blend the general forms of land masses on part of the lower stockpile areas. Gentle grading and curvilinear shapes shall be used to help blend top and side slopes in with the natural topography. Large, undifferentiated, flat slopes shall be avoided. The Department of Environmental Health shall field verify the implementation of this measure after commencement of operation.	Less than significant
	MM 4.13-8c: After initial construction, Borrow/Stockpile Area A shall be revegetated. Contrast, texture, and color matching shall be achieved in all revegetation. All areas shall be replanted with native plant materials that will decrease the amount of value and color contrast with surrounding areas. The Department of Environmental Health shall field verify the implementation of this measure after commencement of operation.	Less than significant
Impact 4.13-9: Borrow/Stockpile Area B would have a significant impact on visual quality and landform quality based on its visibility to SR 76 drivers, the contrast with the existing visual setting, and the overall size and form.	MM 4.13-9a: The project grading plan shall include contouring of landforms to help blend the general forms of land mass on part of the upper stockpile areas. Gentle grading and curvilinear shapes shall be used to help blend top and side slopes in with the natural topography. Large, undifferentiated, flat slopes or pads shall be avoided. Leading edge landforms shall be created within the first two years of the creation of Borrow/Stockpile Area B to help block the views of the working face of the stockpile. The Department of Environmental Health shall field verify the implementation of this measure after commencement of use of Borrow/Stockpile Area B.	Less than significant
	MM 4.13-9b: If a stockpile landform were to remain beyond one full year, the area shall be hydroseeded or other revegetation efforts undertaken. Contrast, texture, and color matching shall be achieved in all revegetation. All areas shall be replanted with native plant materials that will decrease the amount of value and color contrast with surrounding areas. Temporary revegetation of slopes shall also be used to reduce contrast, insofar as the proper colors and textures are utilized in the plant selection process. The Department of Environmental Health shall annually field verify the implementation of this measure after commencement of use of	Less than significant

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	Borrow/Stockpile Area B.	
	MM 4.13-9c: Landform screening shall be planted, including major tree groupings, at the edges of the Borrow/Stockpile Area B to screen the area from view. After installation as determined in the landscape plan (MM 4.13.1), the applicant's landscape architect shall verify implementation of this measure in writing to the Department of Environmental Health.	Less than significant
Impact 4.13-10: The maintenance roads and graded pads associated with the relocation of the SDG&E towers would be visible to a number of highway viewers and would have a significant impact on the landform quality of the area.	MM 4.13-10: In consultation with SDG&E, the applicant shall minimize the pad areas needed for the relocated powerline towers. Related cut slopes shall be permanently revegetated and landform grading techniques shall be used to blend the pads in with adjacent landforms. The cut face of these pads shall be sculpted to allow rock outcrops to remain and be prominent. Additional rock outcrops shall be placed where they do not interfere with the access and maintenance requirements of the towers. The applicant's landscape architect shall provide a letter to the County Department of Environmental Health verifying that these measures shall be implemented prior to the relocation of the towers.	Less than significant
Impact 4.13-11: A visual impact could result if the landfill face were disturbed for necessary recontouring to repair any surface cracking, settlement, and/or surficial slumping. Such repair could result in the removal of vegetation.	MM 4.13-11: If the landfill face is disturbed to repair any surface cracking, settlement, and/or surficial slumping, the area shall be recontoured to match the approved contours and the area shall be revegetated immediately, using the approved plant palette in the Final Closure Plan (see Table 3-5 of the EIR for a plant species list), after the completion of the repair work.	Less than significant
	4.14 SOCIOECONOMICS	
No impacts identified	No mitigation measures required	Not applicable
	4.15 PUBLIC SERVICES AND UTILITIES	
No impacts identified	No mitigation measures required	Not applicable
	4.16 HUMAN HEALTH AND SAFETY	
This is a Proposition C mitigation measure	MM 4.16.C5C: At least five (5) days each week, the Applicant shall inspect for, and clean up, all litter and illegal dumping which occurs on, or adjacent to, the landfill access road and that portion	This is a Proposition C mitigation measure

POTENTIAL IMPACTS	PROPOSITION C MEASURES AND PROJECT MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	of Highway 76 between the intersection with Interstate 15 and the site. The clean up team shall consist of at least one truck with a minimum crew of two persons.	
This is a Proposition C mitigation measure	MM 4.16.C5D: The Applicant shall maintain trained, full-time personnel engaged exclusively and continuously in the inspection of incoming refuse loads for hazardous waste. These personnel shall be stationed at the working face of the landfill whenever the landfill is open to accept waste and shall inspect loads as they are tipped. Hazardous wastes encountered in this fashion shall be handled and disposed of in accordance with state regulations.	This is a Proposition C mitigation measure
This is a Proposition C mitigation measure	MM 4.16.C5F: The Project shall include a network of vertical extraction wells, lateral transmission pipes to a gas recovery facility, and perimeter gas monitoring probes. With this system, the landfill gas will be extracted from the landfill and combusted in an enclosed flare.	This is a Proposition C mitigation measure

TABLE ES-2
MITIGATION MEASURES FOR THE FIRST SAN DIEGO AQUEDUCT RELOCATION OPTION

POTENTIAL IMPACTS	MITIGATION MEASURES FOR FIRST SAN DIEGO AQUEDUCT RELOCATION OPTION	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	4.4 SURFACE HYDROLOGY	
Impact 4.4-1: Relocation of the First San Diego Aqueduct, if implemented, would place a small portion of the pipelines within the 100-year floodplain, potentially resulting in environmental impacts to the pipelines.	MM 4.4-1: If relocation of the First San Diego Aqueduct pipelines is implemented, the applicant shall design and engineer the relocation so that no flood related impacts to the pipelines would occur, in accordance with SDCWA approval. Alternately, the relocation shall be adjusted to avoid placement of the pipelines within the 100-year floodplain.	Less than significant
	4.7 AIR QUALITY & AIR TOXICS HEALTH RISKS	
Impact 4.7-3: The relocation of the First San Diego Aqueduct would contribute to the construction emissions of PM_{10} and NO_x that exceed the APCD significance thresholds.	MM 4.7-3: The construction contractor responsible for the relocation of the First San Diego Aqueduct shall implement the following measures: <ul style="list-style-type: none"> • Use water trucks to keep all areas of vehicle movement sufficiently damp to prevent the raising of dust by travel. • Wet down the site in the late morning and after work is complete for the day. • At least once per day wet down non-active construction areas that have not been reseeded to minimize windblown dust. • As soon as feasible, re-establish groundcover on areas disturbed by construction through seeding and watering those areas that will not be disturbed for extended periods (e.g., two months or more). • Reduce traffic speeds on all unpaved road surfaces to no more than 15 miles per hour. • Maintain construction equipment engines by keeping them tuned in accordance with manufacturers specifications. 	Less than significant
	4.9 BIOLOGICAL RESOURCES	
General Measure	MM 4.9a: A pre-construction meeting shall take place with a qualified biologist and construction personnel. The biologist shall explain the access restrictions on site, the importance of remaining within construction zones, the sensitivity of the habitats and species on site, and shall explain the potential	Less than significant

POTENTIAL IMPACTS	MITIGATION MEASURES FOR FIRST SAN DIEGO AQUEDUCT RELOCATION OPTION	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	consequences of violating the access restrictions and impacting biological resources outside the construction zones. Any accidental impacts to sensitive habitat occur outside the designated impact area shall be mitigated at a 3:1 ratio. A letter from the applicant's biologist and contractor(s) verifying receipt of biological information shall be provided to the County Department of Environmental Health prior to commencement of construction.	
Impact 4.9-19: Construction impacts to 9.5 acres of coastal sage scrub and 0.8 acre of coast live oak woodland would be significant from relocation of the First San Diego Aqueduct pipelines. In addition, potential significant impacts could occur during construction to wildlife, in particular the arroyo southwestern toad, least Bell's vireo, and southwestern willow flycatcher.	MM 4.9-19a: The construction easement (minus permanent access road) shall be revegetated with coastal sage scrub immediately following completion of the pipeline relocation on the landfill site. The landscape plans shall incorporate this revegetation requirement.	Less than significant
	MM 4.9-19b: Coastal sage scrub shall be mitigated at a 2:1 ratio by the preservation of 19.0 acres of coastal sage scrub in dedicated open space on the landfill site.	Less than significant
	MM 4.9-19c: Coast live oak woodland shall be mitigated at a 2:1 ratio by the off-site acquisition of 1.6 acres of existing coast live oak woodland of like quality. The off-site acquisition shall occur in an unincorporated area of San Diego County. A conservation easement shall be placed across the off-site mitigation area to permanently protect the resource. If possible, individual oak trees shall be salvaged from the impact area and transplanted to appropriate open space habitat on the landfill site. The implementation of this mitigation shall be prior to or concurrent with construction or as otherwise determined in consultation with the County.	Less than significant
	MM 4.9-19d: Temporary construction fencing shall be erected under the supervision of a qualified biologist at outside the delineated boundary of dedicated open space (Figure 3b) where it interfaces with impact areas. Where impact areas are adjacent to coast live oak woodland, fencing shall be erected outside the canopy area at a distance of 1.5 times the canopy radius of the outer trees. This fencing shall be erected prior to commencement of brushing or grading activities. The fencing (for example, strand wire or split rail) shall restrict human and equipment	Less than significant

POTENTIAL IMPACTS	MITIGATION MEASURES FOR FIRST SAN DIEGO AQUEDUCT RELOCATION OPTION	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	access but shall allow for wildlife movement.	
	MM 4.9-19e: Impacts to potential arroyo southwestern toad upland habitat from the relocation of the pipelines shall be mitigated through the Wetland Mitigation and Habitat Enhancement Plan to be implemented as part of the landfill project.	Less than significant
	MM 4.9-19f: Temporary erosion control measures such as silt fencing, sand bags, and straw matting shall be used to reduce potential siltation of drainage courses including the San Luis Rey River.	Less than significant
	MM 4.9-19g: The pipeline easement shall be fenced within 2 two kilometers of the San Luis Rey River with exclusion fencing to prevent arroyo southwestern toad access to the construction zone. The fencing shall be a silt-screen type barrier comprised of a minimum 24-inch high fence with the remainder (minimum 12 inches) anchored firmly against the ground. The fence may be buried if necessary to exclude toad access. The fence locations shall be identified by a qualified biologist and adjusted as necessary. Exclusion fencing shall be monitored by a qualified biologist and maintained in its original condition by construction personnel for the entire length of the construction period.	Less than significant
	MM 4.9-19h: Pre- and post-exclusion fencing surveys within the construction zone shall be conducted for arroyo southwestern toads by a biologist permitted by the USFWS to handle the toad. Prior to construction commencement, a minimum of three surveys shall be conducted by this biologist following installation of the fencing. Any toads found shall be relocated to appropriate similar habitat outside project impact areas and in dedicated open space on the landfill site.	Less than significant
	MM 4.9-19i: The trench dug for relocation of the pipelines shall be securely covered at the end of construction each day such that wildlife does not become trapped in the trench.	Less than significant
	MM 4.9-19j: Construction noise shall not result in exceedances of 60 dB(A) L_{eq} on least Bell's vireo and southwestern willow flycatcher habitat between March 15 and September 15 unless noise attenuation measures designed by an acoustician are implemented to reduce noise levels in vireo/flycatcher habitat to below 60 dB(A) L_{eq}	Less than significant

POTENTIAL IMPACTS	MITIGATION MEASURES FOR FIRST SAN DIEGO AQUEDUCT RELOCATION OPTION	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	4.13 AESTHETICS	
Impact 4.13-12: <i>The relocation of the aqueduct and necessary vegetation clearance (within a potential 150-foot wide easement) would have a potentially significant visual quality impact.</i>	MM 4.13-12a: Disturbed areas shall be graded to blend the area with the existing landform. Gentle grading and curvilinear shapes shall be used to help blend slopes in with the natural topography. Large, undifferentiated, flat slopes or pads shall be avoided. The applicant's landscape architect shall provide plans to SDCWA for review and approval. County Department of Environmental Health shall field verify implementation of this measure.	Less than significant
	MM 4.13-12b: After construction, disturbed areas within and around the SDCWA aqueduct easement shall be revegetated with native species in accordance with an approved landscape treatment plan. County Department of Environmental Health shall field verify implementation of this measure.	Less than significant
	MM 4.13-12c: Aqueduct portals and air vents shall be designed to blend in with the landscape through the use of a variety of colors that match the revegetation patch and soil color that the facility is going through. County Department of Environmental Health shall field verify implementation of this measure.	Less than significant

ES

EXECUTIVE SUMMARY ES-1

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